A A O O O O 1 2 2 8 8 7

CARITHMIC AND TRIGONOMETRIC TABLES

DANIEL A. MURRAY

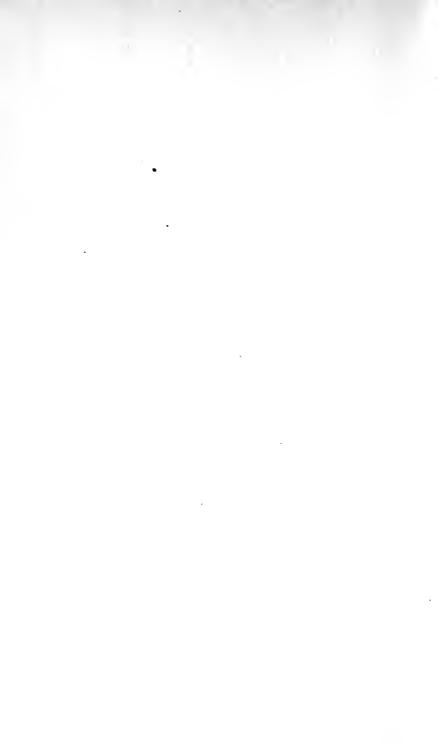


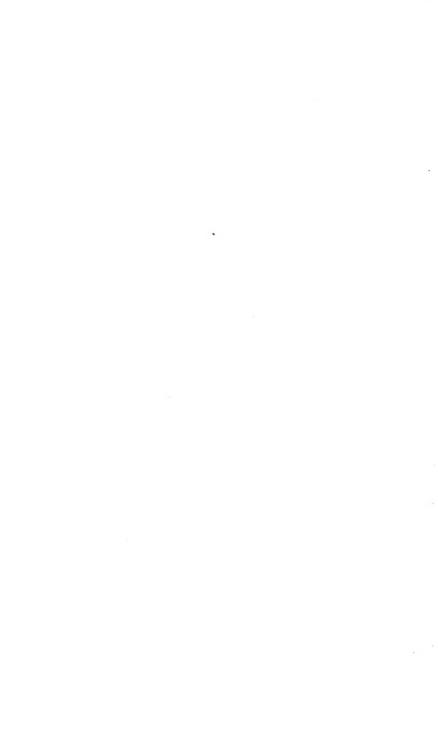
LIBRARY THE UNIVERSITY OF CALIFORNIA SANTA BARBARA PRESENTED BY LOUIS LEVIN

M 689

out Kely

New york, May 11, 1912





Digitized by the Internet Archive in 2007 with funding from Microsoft Corporation

LOGARITHMIC AND TRIGONOMETRIC

TABLES

FIVE-PLACE AND FOUR-PLACE

By D. A. MURRAY, Ph.D.

PROFESSOR OF APPLIED MATHEMATICS IN McGILL UNIVERSITY.

- INTRODUCTORY COURSE IN DIFFERENTIAL EQUA-TIONS, FOR STUDENTS IN CLASSICAL AND ENGINEER-ING COLLEGES. Pp. xvi + 236.
- A FIRST COURSE IN INFINITESIMAL CALCULUS. Pp. xvii + 439.
- DIFFERENTIAL AND INTEGRAL CALCULUS. Pp. xviii + 491.
- PLANE TRIGONOMETRY, FOR COLLEGES AND SECOND-ARY SCHOOLS. With a Protractor. Pp. xiii + 212.
- SPHERICAL TRIGONOMETRY, FOR COLLEGES AND SECONDARY SCHOOLS. Pp. x + 114.
- PLANE AND SPHERICAL TRIGONOMETRY. In One Volume. With a Protractor. Pp. 349.
- PLANE AND SPHERICAL TRIGONOMETRY AND TABLES. In One Volume. Pp. 448.
- PLANE TRIGONOMETRY AND TABLES. In One Volume. With a Protractor. Pp. 324.
- LOGARITHMIC AND TRIGONOMETRIC TABLES. FIVE-PLACE AND FOUR-PLACE. Pp. 99.

NEW YORK: LONGMANS, GREEN, & CO.

LOGARITHMIC AND TRIGONOMETRIC

TABLES

FIVE-PLACE AND FOUR-PLACE

EDITED BY

DANIEL A. MURRAY, Ph.D. PROFESSOR OF APPLIED MATHEMATICS IN MCGILL UNIVERSITY

LONGMANS, GREEN, AND CO.
FOURTH AVENUE & SOTH STREET, NEW YORK
LONDON, BOMBAY, AND CALCUTTA

Copyright, 1899, By LONGMANS, GREEN, AND CO.

ALL RIGHTS RESERVED.

First Edition, 1899.

Reprinted, July, 1902; April., 1905; February, 1906;

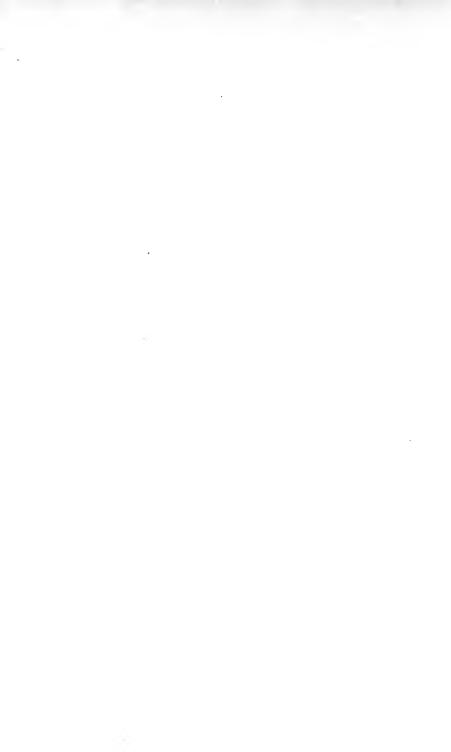
Accust, 1907; June, 1909; June, 1911.

Normood Press
J. S. Cushing Co. — Berwick & Smith Co.
Norwood, Mass., U S.A.

CONTENTS.

TABLE	8	PAGES
	EXPLANATION OF THE TABLES	1-11
I.	FIVE-PLACE LOGARITHMS OF NUMBERS	12-36
II.	FIVE-PLACE LOGARITHMS OF THE SINE, COSINE, TANGENT, AND	
	COTANGENT FOR EACH MINUTE FROM 0° TO 90°	37-82
III.	FOUR-PLACE TABLES	83-95
	(1) Logarithms of Numbers	84-85
	(2) LOGARITHMS OF THE SINE, COSINE, TANGENT, AND CO-	
	tangent at Intervals of Ten Minutes from 0°	
	то 90°	86-90
	(3) VALUES OF THE SINE, COSINE, TANGENT, AND COTAN-	
	GENT AT INTERVALS OF TEN MINUTES FROM 0° TO 90°	91-95

Note. These tables have been arranged primarily for students in elementary trigonometry, and the explanations are intended for beginners in that branch of mathematics. Tabular differences and proportional parts should be calculated, and not copied from tables, by those who use logarithmic and trigonometric tables for the first time. The editor may be allowed to take this opportunity of expressing his belief that the principles and use of common logarithms can be easily explained in the school course in arithmetic, and practical applications given which will be interesting and advantageous to young pupils.



EXPLANATION OF THE TABLES.

TABLE I.

COMMON LOGARITHMS.

- N.B. The meaning and properties of logarithms are explained in works on algebra.
- 1. The first page of the table gives the characteristics and mantissas of numbers from 1 up to 100. The remainder of the table gives only mantissas. The characteristics are obtained by the following rule, which is deduced in algebra:*

When the number is greater than 1, the characteristic is positive, and is one less than the number of figures to the left of the decimal point; when the number is less than 1, the characteristic is negative, and is one more than the number of zeros between the decimal point and the first significant figure.

The first three figures of a number of four figures are found in the left-hand column marked N; the fourth figure of the number is found in the lines at the top and the foot of the page. The last three figures of the mantissa are found in the same line as the first three figures of the number, and in the same column as the fourth figure of the number. The first two figures of the mantissa are in the column headed O, and are printed only once. They are found either in the same line as the last three figures, or in the first line above which contains a whole mantissa. If, however, a * precedes the last three figures of the mantissa, the first two figures are found in the following line.

^{*}This rule may be easily deduced in arithmetic.

2. To find the logarithm of a number.

Rule: Write the characteristic, and then annex the mantissa found by means of the table.

- (a) A number of four figures.
- $\log 3552 = 3.55047$: $\log 355.7 = 2.55108$; $\log 35.74 = 1.55315$; $\log 36.34 = 1.56038$; $\log 536.2 = 2.72933$; $\log 5.371 = 0.73006$.
- (b) A number of less than four figures. In this case, annex ciphers, or suppose them to be annexed, and proceed as in case (a). $\log .213 = \overline{1.32838}$; $\log 47.6 = 1.67761$; $\log .0375 = \overline{2.57403}$.
 - (c) A number of more than four figures.

To find log 47653. The characteristic is 4. The mantissa, as shown in algebra, is the same as the mantissa of log 4765.3. Log 4765.3 lies between log 4765 and log 4766. Hence the mantissa of log 4765.3 is between the mantissas of log 4765 and log 4766. It is assumed that the change in the mantissa is proportional to the change in the number, as the latter increases from 4765 to 4766; that is,

mantissa of $\log 4765.3 = \text{mantissa}$ of $\log 4765 + .3 \times (\text{mantissa} \text{ of } \log 4766 - \text{mantissa} \text{ of } \log 4765).*$

mantissa of $\log 4766 = .67815$ mantissa of $\log 4765 = .67806$ mantissa of $\log 4765 = .67806$ difference for $.3 = .3 \times 9 = 27$ difference for 1 = 9 \therefore mantissa of $\log 4765.3 = .678087$

or, =.67809 ∴ log 47653=4.67809

Note 1. By general agreement, a number with six or more decimal places is reduced to a number with five in the following way:

If a number less than 5 is in the sixth decimal place, then the number in the fifth place is left unchanged; if a number greater than 5 is in the sixth place, or if there is a 5 in the sixth place and it is followed by figures other

^{*} It is assumed that when a number varies from one value to another, the change in the mantissa is proportional to the change in the number if the latter change is small in comparison with the number. This is not strictly correct, but is accurate enough for practical purposes.

than zeros only, then the number in the fifth place is increased by unity; if the number in the sixth place is 5 and it is followed by zeros only, then an even number in the fifth place is left unchanged, and an odd number in the fifth place is increased by unity.

Note 2. The difference between the mantissas for two consecutive numbers of four figures is called their tabular difference, and is printed in the column marked **D**. At the lower parts of the first three pages of the table the tabular differences for the mantissas on these pages are multiplied by the nine digits expressed as tenths. The results, which are called proportional parts, are the amounts to be added in obtaining the logarithms of five-figure numbers. It is better for the beginner in logarithmic computation to find the tabular differences by subtraction, and make the calculations for himself. The process described above for finding the logarithms of numbers of five or more figures, is called interpolation.

To find log 476.532.

log
$$476.5 = 2.67806$$

difference for $.32 = .32 \times 9 = 288$
 \therefore log $476.532 = 2.67809$ [See Ex. above.]

Note 3. A five-place table of logarithms is not used, in general, with numbers of more than five figures. In numbers having more than five figures the digits beyond the fifth have little effect on logarithms that are calculated no farther than to five places of decimals.

To find log 83.946.

$$\log 83.94 = 1.92397$$
 $\dim e = .6 \times 5 = 3$
 $\therefore \log 83.946 = 1.92400$

To find log 1236.2.

 $\log 1236 = 3.09202$
 $\dim e = .2 \times 35 = 7$
 $\therefore \log 1236.2 = 3.09209$

To find log 83.9468.

To find log 83.9468.

 $\log 83.946 = 1.92397$
 $\dim e = .68 \times 5 = 34$
 $\therefore \log 83.9468 = 1.92400$

To find log 1236.24.

 $\log 1236 = 3.09202$
 $\dim e = .24 \times 35 = 84$
 $\therefore \log 1236.24 = 3.09210$

Rule: Find the mantissa corresponding to the first four figures of the number; multiply the tabular difference at that place in the table by the fifth and following figures treated as a decimal; and add the product to the mantissa just found.

Note 4. The logarithm of the reciprocal of a number is called the *co-logarithm* of the number, or the *arithmetical complement* of the logarithm of the number. For instance, $\log_{\frac{3}{2}5} = \operatorname{colog} 325$. Now

$$\log_{\frac{1}{325}} = \log 1 - \log 325 = 0 - 2.51188 = (10 - 2.51188) - 10 = 7.48812 - 10.$$

Thus the cologarithm of a number is equal to the negative logarithm of the number. The cologarithm can be written directly from the logarithm in the table. The use of cologarithms sometimes helps in computation. For example, $\log \frac{23.41 \times 375}{92.83} = \log 23.41 + \log 375 + \operatorname{colog} 92.83.$

3. To find the number corresponding to a given logarithm. This operation is the reverse of the preceding. The position of the decimal point in the required number is shown by the characteristic. The number of figures before the decimal point is one more than the characteristic when the latter is positive; when the characteristic is negative the number is a decimal, and the number of ciphers between the decimal point and the first significant digit is one less than the figure in the characteristic. (See the rule for finding the characteristic.)

The sequence of figures in the number is found from the mantissa.

(a) When the given mantissa is in the tables. The first two figures of the mantissa will be found in the column headed 0; the last three figures will be found in the same line as the first two, or in the line above (where it will be preceded by *), or in one of the lines following. The first three figures of the number are in the column headed N, and are in the same line as the last three figures of the mantissa; the fourth figure of the number is at the top of the page in the same column as the last three figures of the mantissa.

To find the number whose logarithm is 2.55047. On turning in the table to the mantissa 55047 it is found that the corresponding sequence of figures is 3552. The characteristic 2 shows that the required number is 355.2. The number having $\overline{2}.55047$ for its logarithm is .03552.

Given $\log N = 5.67815$, find N. The sequence of figures in the required number, as found on turning in the table to the mantissa 67815, is 4766. The characteristic 5 shows that the required number is 476600. The number having $\overline{1}.67815$ for its logarithm is .4766.

(b) When the given mantissa is not in the tables. In this case the process of interpolation is employed.

To find the number whose logarithm is 2.57072. Inspection of the table shows that the given mantissa lies between the tabulated mantissas, 57066 and 57078. Hence the required number lies between 372.1 and 372.2.

mantissa of	3722 = .57078	given mantissa	=.57072
mantissa of	3721 = .57066	mantissa of	3721 = .57066
difference for	$1 = \frac{}{12}$	difference	= 6

If 12 is the difference for 1, for what is 6 the difference? Obviously for $\frac{6}{12}$ of 1, *i.e.* .5. Hence the required number is 372.15.

Rule: Find the number corresponding to the mantissa in the table next less than the given mantissa; find the difference between these mantissas; divide this difference by the tabular difference; and annex the quotient to the four figures already found.

TABLE II.

LOGARITHMS OF CERTAIN TRIGONOMETRIC RATIOS.

4. The numbers given in this table are sometimes called log-arithmic sines, logarithmic cosines, etc., or the tabular logarithms of the sines, cosines, etc. These terms are considered necessary because these numbers, with the exception of those in one column on each page, are not the logarithms of the sines, cosines, etc., but are these logarithms increased by 10. Hence, in working examples these numbers should be diminished by 10. In the column headed L. Cot., however, the logarithms are given correctly.

The degrees from 0° to 44° are given at the top of the page, and the minutes to be taken with any of these degrees are given from 0 down to 60 in the column on the left. The degrees from 45° to 89° are given at the foot of the page, and the minutes to be taken with any of these degrees are given from 0 up to 60 in the column on the right. For the degrees printed at the top of the page the contents of the columns are indicated at the top of the page; for the degrees printed at the foot of the page the contents of the columns are indicated at the foot of the page. A ratio is printed at the top of each column (excepting the columns for minutes), and the corresponding co-ratio is at the foot. This convenient arrangement of the table is possible, because, as shown

in trigonometry, a trigonometric ratio of an angle is equal to the corresponding co-ratio of the complement of the angle. For instance, L. Sin. $33^{\circ}\ 26' = 9.74113 = L$. Cos. $56^{\circ}\ 34'$. The column headed L. Cot. gives *correctly* the logarithms of the cotangents of angles from 0° to 45° , and the logarithms of the tangents of angles from 45° to 90° .

5. To find the logarithm of a trigonometric ratio of an acute angle.

(a) When the angle is given in degrees and minutes. If the angle is less than 45°, turn to where the number of degrees is given at the top of the page; find the number of minutes in the column on the left marked'; write the number which is in line with the number of minutes, and in the column under the ratio named; subtract 10 when the number found is not in the column headed L. Cot. If the angle is 45° or greater than 45°, turn to where the number of degrees is given at the foot of the page; find the number of minutes in the column on the right marked'; write the number which is in line with the number of minutes, and in the column over the ratio named; subtract 10 when the number found is not in the column headed L. Cot., or, what is the same thing, in the column that has L. Tan. at its foot.

```
\begin{array}{ll} \log\sin 23^{\circ}\,20' = 9.59778 - 10\,; & \log\tan 37^{\circ}\,50' = 9.89020 - 10\,; \\ \log\cos 55^{\circ}\,40' = 9.75128 - 10\,; & \log\cot 78^{\circ}\,10' = 9.32122 - 10\,; \\ \log\cot 33^{\circ}\,26' = 0.18032\,; & \log\tan 47^{\circ}\,50' = 0.04302. \end{array}
```

(b) When the angle is given in degrees, minutes, and seconds. In this case the logarithms required are obtained by the process of interpolation.

To find log sin 36° 42′ 20″. The required number lies between log sin 36° 42′ and log sin 36° 43′. It is assumed that the difference between the logarithms of the sines of two angles is proportional to the difference between the angles when the latter difference is small compared with either of the angles. (This is not strictly correct, but is accurate enough for practical purposes.)

$$\begin{array}{ll} \log \sin 36^{\circ} 43' = 9.77660 - 10 & \log \sin 36^{\circ} 42' = 9.77643 - 10 \\ \log \sin 36^{\circ} 42' = 9.77643 - 10 & \text{diff. for } 20'' = 17 \times \frac{20}{60} = 56 \cdots \\ & \text{diff. for } 1' = 17 & \therefore \log \sin 36^{\circ} 42' 20'' = 9.77649 - 16 \end{array}$$

As the sine increases when the angle changes from 0° to 90°, log sin 36° 42′ 20″ is greater than log sin 36° 42′; and hence the difference for 20″ is added. The work indicated on the left may be omitted, since the difference for 1′ can be taken directly from the tables.

To find log cos 23° 36′ 40″. $\log \cos 23° 36′ = 9.96207 - 10$ difference for $40'' = 6 \times \frac{40}{60} = 4$ $\therefore \log \cos 23° 26′ 40″ = 9.96203 - 10$

Since the cosine decreases as the angle changes from 0° to 90°, log cos 23° 36′ 40″ is less than log cos 23° 36′; and hence, the difference for 40″ is subtracted. The differences for seconds are added in the case of the logarithm of the tangent, and subtracted in the case of the logarithm of the cotangent.

Note 1. Since $\sec A = \frac{1}{\cos A}, \log \sec A = -\log \cos A = \operatorname{colog} \cos A;$ since $\operatorname{cosec} A = \frac{1}{\sin A}, \log \operatorname{cosec} A = -\log \sin A = \operatorname{colog} \sin A.$

Note 2. It is shown in trigonometry that the trigonometric ratio of any angle can be expressed in terms of some trigonometric ratio of an angle less than 90° . Hence the logarithm of any trigonometric ratio of any angle can be found.

6. To find the acute angle that has a given logarithm of a trigonometric ratio.

This operation is the reverse of the preceding.

(a) When the given logarithmic ratio is in the table.

To find A, given that $\log \sin A = 9.77558 - 10$, and B, given that $\log \sin B = 9.88647 - 10$. Here L. Sin. A = 9.77558, and L. Sin. B = 9.88647. Look through the columns having L. Sin. at the top or at the foot, until the given L. Sin. is found. If this number is in the column headed L. Sin., write the number of degrees printed at the top of the page, and the number of min utes which is in the column on the left and in line with the given L. Sin. If the given L. Sin. is in the column having L. Sin. at its foot, write the number of degrees printed at the foot of the page, and the number of minutes which is in the column on

the right and in line with the given L. Sin. The logarithms of other ratios are treated in a similar manner. In the examples given above, the acute angles that satisfy the given conditions are, $A = 36^{\circ} 37'$, $B = 50^{\circ} 21'$.

(b) When the given logarithmic ratio is not in the table.

To find A when $\log \sin A = 9.80218 - 10$. Examination of the columns for L. Sin. in the table shows that L. Sin. $39^{\circ} 21' = 9.80213$, and L. Sin. $39^{\circ} 22' = 9.80228$. Hence the angle required lies between $39^{\circ} 21'$ and $39^{\circ} 22'$.

$$\begin{array}{ll} \log \sin 39^{\circ} \, 22' = 9.80228 - 10 & \log \sin A = 9.80218 - 10 \\ \log \sin 39^{\circ} \, 21' = 9.80213 - 10 & \log \sin 39^{\circ} \, 21' = 9.80213 - 10 \\ \text{difference for 1'} = & 15 & \text{difference} = & 5 \end{array}$$

If 15 is the difference for 1', for what is 5 the difference? Obviously for $\frac{5}{15}$ of 1', i.e. 20". Hence the acute angle that has the given logarithm of a sine is 39° 21′ 20".

To find A when $\log \cos A = 9.58824 - 10$. Examination of the columns for L. Cos. in the table shows that L. Cos. 67° 12' = 9.58829, and L. Cos. 67° 13' = 9.58799. Hence the acute angle required lies between 67° 12' and 67° 13'.

$$\begin{array}{ll} \log \cos 66^{\circ} 12' = 9.58829 - 10 & \log \cos 67^{\circ} 12' = 9.58829 - 10 \\ \log \cos 67^{\circ} 13' = 9.58799 - 10 & \log \cos A = 9.58824 - 10 \\ \text{difference for 1'} = & 30 & \text{difference} = & 5 \end{array}$$

If 30 is the difference for 1', for what is 5 the difference? Obviously for $\frac{5}{30}$ of 1', i.e. 10". Hence the acute angle that has the given logarithm of a cosine is $67^{\circ} 12' 10"$. The work on the left in these examples need not be written, for it can be performed mentally on inspection of the tables. The successive differences for 1' are called tabular differences for one minute.

Rule: In order to obtain the acute angle corresponding to a given logarithm of a sine or tangent, find the degrees and minutes corresponding to the logarithm next less than the given logarithm; divide the difference between these logarithms by the tabular difference for 1' at that place in the table; this gives the

fraction of a minute to be added to the degrees and minutes already found. In order to obtain the acute angle corresponding to a given logarithm of a cosine or cotangent, find the degrees and minutes corresponding to the logarithm next greater than the given logarithm; divide the difference between these logarithms by the tabular difference for 1' at that place in the table; this gives the fraction of a minute to be added to the degrees and minutes already found.

- Note 1. The logarithm next *less* is taken in the case of the sine and tangent, since these ratios increase as the angle increases from 0° to 90° ; the logarithm next *greater* is taken in the case of the cosine and cotangent, since these ratios decrease as the angle increases from 0° to 90° .
- Note 2. It is shown in trigonometry that there are many angles in addition to an acute angle, which have the same trigonometric ratio, and accordingly the same logarithm of the ratio.

TABLES III.

FOUR-PLACE TABLES.

7. Four-place tables are accurate enough for many purposes. The first two pages of Tables III. give four-place logarithms of numbers from 1 to 999. These logarithms should not be used, in general, with numbers that contain more than four figures. The rules for using this table are similar to the rules given in connection with Table I.

$$\log 723 = 2.8591$$
; $\log 9.36 = .9713$. To find $\log 3642$. $\log 3640 = 3.5611$ difference for $2 = .2 \times 12 = 24$ $\therefore \log 3642 = 3.5613$

To find the number whose logarithm is 2.6860.

given $\log = 2.6860$ $\log 485 = 2.6857$ tabular difference for 1 = 9; difference = 3 $\therefore \text{ addition} = \frac{3}{9} \text{ of } 1 = .3 \cdots \quad \therefore \text{ number} = 485.3 \cdots$

8. The second of Tables III. gives the augmented logarithms of angles at intervals of ten minutes from 0° to 90°. The angles from 0° to 45° are printed on the left, and the angles from 45° to 90° are printed on the right. This table is used in the same manner as Table II. It is necessary, however, to pay attention to the fact that the difference between the successive angles tabulated is 10′, instead of 1′ as in Table II.

To find log tan 29: 15'.

log tan 29° 10′ = 9.7467 - 10
difference for 5′ =
$$\frac{5}{10}$$
 of 30 = $\frac{15}{10}$
 \therefore log tan 29° 15′ = 9.7482 - 10.

To find A when log cot A = .4531.

 $\log \cot 19^{\circ} 20' = .4549$ $\log \cot A = .4531$

tabular diff. for 10' = 40; diff. = 18

.. addition = $\frac{18}{40}$ of 10' = 4'.5. .. $A = 19^{\circ} 24'.5$.

9. The last of Tables III. gives the actual numerical values to four places of decimals, of the sines, cosines, tangents, and cotangents of angles, at intervals of ten minutes from 0° to 90°. These values are usually called natural sines, natural cosines, etc., and are denoted by N. Sin., N. Cos., etc., in order to distinguish them from the so-called logarithmic sines, cosines, etc., given in the immediately preceding table and in Table II. (Logarithms were sometimes ealled artificial numbers, and ordinary numbers were regarded as natural numbers.) The explanations concerning this four-place table, and the rules for finding the trigonometric ratios corresponding to given angles, and for finding the angles corresponding to given ratios, are the same as the explanations and rules in the preceding table and in Table II., if all references to logarithms in the latter rules be omitted. Those who are using trigonometric tables for the first time, should test the statements made concerning the relations between the numbers in Table II. and the second of Tables III. on the one hand, and the numbers in the third of Tables III. on the other.

To find A when $\cot A = .4336$.

$$\cot 66^{\circ} \ 30' = .4348$$

$$\cot A = .4336$$

$$\cot A = .4336$$
 tabular diff. for $10' = 34$; diff. = 12 : addition = $\frac{1}{3}\frac{2}{4}$ of $10' = 3'.5$. $\therefore A = 66^{\circ} \ 33'.5$.

To find sin 36° 23'.

$$\sin 36^{\circ} 20' = .5925$$

difference for $3' = \frac{3}{10}$ of $23 = 69$
∴ $\sin 36^{\circ} 23' = .5932$

- Ex. 1. Compare the four-place mantissas of the logarithms of several numbers with the corresponding five-place mantissas. Make a similar comparison between the four-place and five-place tables in the case of the trigonometric ratios of several angles.
- Ex. 2. In the four-place table of natural sines, etc., find sin 37° 25′, tan 40° 30′, cot 27° 30′, cos 31° 15′, sin 50° 20′, tan 63° 25′, cot 74° 25′, cos 51° 35′. Find the logarithms of these numbers by means of Table I. Compare the results with the values given for the logarithmic sines, etc., in Table II. and the second of Tables III.

I.

COMMON LOGARITHMS OF NUMBERS

GIVING CHARACTERISTICS AND MANTISSAS OF LOGARITHMS OF NUMBERS FROM 1 TO 100, AND MANTISSAS ONLY OF NUMBERS FROM 100 TO 10000.

LOGARITHMS OF NUMBERS.

N	Log.	N	Log.	N	Log.	N	Log.
1	0,00000	26	1.41497	51	1,70757	76	1.88081
3	0.30103	27	1.43136	52	1.71600	77	1.88649
3	0.47712	28	1.44716	53	1.72428	78	1,89209
4	0.60206	29	1,46240	54	1.73239	79	1.89763
5	0.69897	30	1.47713	55	1.74036	80	1.90309
6	0.77815	31	1.49136	56	1,74819	81	1.90849
78	0.84510	33	1.50515	57	1.75587	82	1.91381
	0.90309	33	1.51851	58	1.76343	83	1.91908
9	0.95424	34	1.53148	59	1.77085	84	1.92428
10	1.00000	35	1.54407	60	1.77815	85	1.92942
11	1.04139	36	1.55630	61	1.78533	86	1.93450
12	1.07918	37	1.56820	62	1.79239	87	1.93952
13	1.11394	38	1.57978	63	1.79934	88	1.94448
14	1.14613	39	1.59106	64	1.80618	89	1.94939
15	1.17609	40	1.60206	65	1.81291	90	1.95424
16	1.20413	41	1.61278	66	1.81954	91	1.95904
17	1.23045	43	1.62325	67	1.82607	92	1.96379
18	1.25527	43	1.63347	68	1.83251	93	1.96848
19	1.27875	44	1.64345	69	1.83885	94	1.97313
20	1.30103	45	1.65321	70	1.84510	95	1.97772
21	1.32222	46	1.66276	71	1.85126	96	1.98227
22	1.34242	47	1.67210	72	1.85733	97	1.95677
23	1.36173	48	1.68124	73	1.86332	98	1.99123
24	1.38021	49	1.69020	74	1.86923	99	1.99564
25	1.39794	50	1.69897	75	1.87506	100	2.00000

N	0	1	2	3	4	5	6	7	8	9	D
100	00 000	043	087	130	173	217	260	303	346	389	43
101 102 103	432 860 01 284	475 903 326	518 945 368	561 988 410	604 *030 452	647 *072 494	689 *115 536	732 *157 578	775 *199 620	817 *242 662	43 42 42
104 105 106	703 02 119 531	745 160 572	787 202 612	828 243 653	870 284 694	912 325 735	953 366 776	995 407 816	*036 449 857	*078 490 898	42 41 41
107 108 109	938 03 342 743	979 383 782	*019 423 822	*060 463 862	*100 503 902	*141 543 941	*181 583 981	*222 623 *021	*262 663 *060	*302 703 *100	40 40 40
110	04 139	179	218	258	297	336	376	415	454	493	39
111 112 113	532 922 05 308	571 961 346	610 999 385	650 *038 423	689 *077 461	727 *115 500	766 *154 538	805 *192 576	844 *231 614	883 *269 652	39 39 38
114 115 116	06 070 446	729 108 483	767 145 521	805 183 558	843 221 595	881 258 633	918 296 670	956 333 707	994 371 744	*032 408 781	38 38 37
117 118 119	$07{}^{819}_{188}_{555}$	856 225 591	893 262 628	930 298 664	967 335 700	*004 372 737	*041 408 773	*078 445 809	*115 482 846	*151 518 882	37 37 36
120	918	954	990	*027	*063	*099	*135	*171	*207	*243	36
121 122 123	08 279 636 991	314 672 *026	350 707 *061	386 743 *096	422 778 *132	458 814 *167	493 849 *202	529 884 *237	565 920 *272	600 955 *307	36 35 35
124 125 126	$09\ 342\\ 691\\ 10\ 037$	377 726 072	412 760 106	447 795 140	482 830 175	517 864 209	552 899 243	587 934 278	621 968 312	656 *003 346	35 35 34
127 128 129	380 721 11 059	415 755 093	449 789 126	483 823 160	517 857 193	551 890 227	585 924 261	619 958 294	653 992 327	687 *025 361	34 34 34
N	0	1	2	3	4	5	6	7	8	9	D
PP	44	43	42	41		40	39	38		37	36
1 2 3	4.4 8.8 13.2	4.3 8.6 2.9	4.2 8.4 12.6	4.1 8.2 12.3	3	4.0 8.0 2.0	3.9 7.8 11.7	3.8 7.6 11.4	3 7	3.7	3.6 7.2 10.8
5	22.0	7.2 21.5 25.8	$\begin{array}{c} 16.8 \\ 21.0 \\ 25.2 \end{array}$	16.4 20.3 24.6	5 2	6.0 0.0 4.0	15.6 19.5 23.4	15.2 19.0 22.8	18	8.5 8.2	14.4 18.0 21.6
7 8 9	35.2	30.1 34.4 38.7	29.4 33.6 37.8	28.7 52.8 36.9	3	8.0 2.0 6.0	27.3 31.2 35.1	26.6 30.4 34.9	4 29	6.9 0.6 3.3	25.2 28.8 32.4

N	0	1	2	3	4	5	6	7	8	9	D
130	11 394	428	461	494	528	561	594	628	661	694	33
131	727	760	793	826	860	893	926	959	992	*024	33
132	12 057	090	123	156	189	222	254	287	320	352	33
133	385	418	450	483	516	548	581	613	646	678	33
134	710	743	775	808	840	872	905	937	969	*001	30
135	13 0.33	066	098	130	162	194	226	258	290	322	33
136	354	386	418	450	481	513	545	577	609	640	33
137	672	704	735	767	799	830	862	893	925	956	32
138	988	*019	*051	*082	*114	*145	*176	*208	*239	*270	31
139	14 301	333	364	395	426	457	489	520	551	582	31
140	613	644	675	706	737	768	799	829	860	891	31
141	922	953	983	*014	*045	*076	*106	*137	*168	*198	31
142	15 229	259	290	320	351	381	412	442	473	503	31
143	534	564	594	625	655	685	715	746	776	806	30
144	836	866	897	927	957	987	*017	*047	*077	*107	30
145	16 137	167	197	227	256	286	316	346	376	406	30
146	435	465	495	524	554	584	613	643	673	702	30
147	732	761	791	820	850	879	909	938	967	997	29
148	17 026	056	085	114	143	173	202	231	260	289	29
149	319	348	377	406	435	464	493	522	551	580	29
150	609	638	667	696	725	754	782	811	840	869	29
151	898	926	955	984	*013	*041	*070	*099	*127	₹156	29
152	18 184	213	241	270.	298	327	355	384	412	441	29
153	469	498	526	554	583	611	639	667	696	724	28
154	753	780	808	837	865	893	921	949	977	*005	28
155	19 033	061	089	117	145	173	201	229	257	285	28
156	312	340	368	396	424	451	479	507	535	562	28
157	590	618	645	673	700	728	756	7°3	811	838	28
158	866	893	921	948	976	*003	*030	*058	*085	*112	27
159	20 140	167	194	222	249	276	303	330	358	385	27
N	0	1	2	3	4	5	6	7	8	9	D
PP	35	34	33	32		31	30	29	2	28	27
1 2 3	3.5 7.0 10.5	3.4 6.8 10.2	3.3 6.6 9.9	3. 6. 9.	4	3.1 6.2 9.3	3.0 6.0 9.0	2.9 5.8 8.7	5 5	2.8 5.6 5.4	2.7 5.4 8.1
4 5 6	14.0 17.5 21.0	13.6 17.0 20.4	13.2 16.5 19.8	12. 16. 19.	0 1	2.4 5.5 8.6	12,0 15.0 18.0	11.6 14.5 17.4	14	.2 1.0 3.8	10,8 13.5 16.2
7 8 9	24.5 28.0 31.5	23.8 27.2 30,6	23.1 26.4 29.7	20. 25 28.	6 2	1.7 4.8 7.9	21.0 24.0 27.0	20.3 23.2 26.1	29	0.6 2.4 5.2	18.9 21.6 24.3

N	0	1	2	3	4	5	6	7	8	9	D
160	20 412	439	466	493	520	548	575	602	629	656	27
161 162 163	683 952 21 219	710 978 245	737 *005 272	763 *032 299	790 *059 325	817 *085 352	844 *112 378	871 *139 405	898 *165 431	925 *192 458	27 27 27
164 165 166	484 748 22 011	511 775 037	537 801 063	564 827 089	590 854 115	617 880 141	643 906 167	669 932 194	696 958 220	722 985 246	26 26 26
$\begin{array}{c} 167 \\ 168 \\ 169 \end{array}$	272 531 789	298 557 814	324 583 840	350 608 866	376 634 891	$\frac{401}{660}$ 917	427 686 943	453 712 968	479 737 994	505 763 *019	26 26 26
170	23 045	070	096	121	147	172	198	223	249	274	25
171 172 173	300 553 805	325 578 830	350 603 855	376 629 880	401 654 905	426 679 930	452 704 955	477 729 980	502 754 *005	528 779 *030	25 25 25
174 175 176	$\begin{array}{c} 24\ 055 \\ 304 \\ 551 \end{array}$	080 329 576	105 353 601	130 378 625	155 403 650	180 428 674	204 452 699	229 477 724	254 502 748	279 527 773	25 25 25
177 178 179	797 25 042 285	822 066 310	846 091 334	871 115 358	895 139 382	920 164 406	944 188 431	969 212 455	993 237 479	*018 261 503	25 24 24
180	527	551	575	600	624	648	672	696	720	744	24
181 182 183	$26\ 007\ 245$	792 031 269	816 055 293	840 079 316	864 102 340	\$88 126 364	912 150 387	935 174 411	959 198 435	983 221 458	24 24 24
184 185 186	482 717 951	505 741 975	529 764 998	553 788 *021	576 811 *045	600 834 *068	623 858 *091	647 881 *114	670 905 *138	694 928 *161	24 23 23
187 188 189	27 184 416 646	207 439 669	231 462 692	254 485 715	277 508 738	300 531 761	323 554 784	346 577 807	370 600 830	393 623 852	23 23 23
N	0	1	2	3	4	5	6	7	8	9	D
PP	27		26		25		24		23	2	2
1 2 3	2.7 5.4 8.1	1	2.6 5.2 7.8		2.5 5.0 7.5		2.4 4.8 7.2		2.3 4.6 6.9	4	2,2 4,4 3,6
4 5 6	10.8 13.5 16.2	5	10.4 13.0 15.6		10.0 12.5 15.0		$9.6 \\ 12.0 \\ 14.4$		9.2 11.5 13.8	1	3.8 1.0 3.2
7 8 9	18.9 21.6 24.3	3	18.2 20.8 23.4	. 1	17.5 20.0 22.5		16.8 19.2 21.6		16.1 18.4 20.7	1'	5.4 7.6 9.8

N	0	1	2	3	4	5	6	7	8	9	D
190	875	898	921	944	967	989	*012	*035	*058	*081	23
191	28 103	126	149	171	194	217	240	262	285	307	23
192	330	353	375	398	421	443	466	488	511	533	23
193	556	578	601	623	646	668	691	713	735	758	22
194	780	803	825	847	870	892	914	937	959	981	22
195	29 003	026	048	070	092	115	137	159	181	203	2:
196	226	248	270	292	314	336	358	380	403	425	22
197	447	469	491	513	535	557	579	601	623	645	C) C
198	667	688	710	732	754	776	798	820	842	863	636
199	885	907	929	951	973	994	*016	*038	*060	*081	22
200	30 103	125	146	168	190	211	233	255	276	298	22
201	320	341	363	384	406	428	449	471	492	514	22
202	535	557	578	600	621	643	664	685	707	728	21
203	750	771	792	814	835	856	878	899	920	942	21
204	963	984	*006	*027	*048	*069	*091	*112	*133	*154	21
205	31 175	197	218	239	260	281	302	323	345	366	21
206	387	408	429	450	471	492	513	534	555	576	21
207	597	618	639	660	681	702	723	744	765	785	21
208	806	827	848	869	890	911	931	952	973	, 994	21
209	$32\ 015$	035	056	077	098	118	139	160	181	201	21
210	222	243	263	284	305	325	346	366	387	408	21
211	428	449	469	490	510	531	552	572	593	613	20
212	634	654	675	695	715	736	756	777	797	818	20
213	838	858	879	899	919	940	960	980	*001	*021	20
214	33 041	062	082	102	122	143	163	183	203	224	20
215	244	264	284	304	325	345	365	385	405	425	20
216	445	465	486	506	526	546	566	586	606	626	20
217	646	666	686	706	726	746	766	786	806	826	20
218	846	866	885	905	925	945	965	985	*005	*025	20
219	34 044	064	084	104	124	143	163	183	203	223	20
220	242	262	282	301	321	341	361	380	400	420	20
221	439	459	479	498	518	537	557	577	596	616	20
222	635	655	674	694	713	733	753	772	792	811	19
223	830	850	869	889	908	928	947	967	986	*005	19
224	35 025	044	064	083	102	122	141	160	180	199	19
225	218	238	257	276	295	315	334	358	372	392	-19
226	411	430	449	468	488	507	526	545	564	583	19
227	603	622	641	660	679	698	717	736	755	774	19
228	793	813	832	851	870	889	908	927	946	965	19
229	984	*003	*021	*040	*059	*078	*097	*116	*135	*154	19
			-				-	_		_	_
N	0	1	2	3	4	5	6	7	8	9	D

N	0	1	2	3	4	5	6	7	8	9	D
230	36 173	192	211	229	248	267	286	305	324	342	19
231	361	380	399	418	436	455	474	493	511	530	19
232	549	568	586	605	624	642	661	680	698	717	19
233	736	754	773	791	810	829	847	866	884	903	19
234	922	940	959	977	996	*014	*033	*051	*070	*088	18
235	37 107	125	144	162	181	199	218	236	254	273	18
236	291	310	328	346	365	383	401	420	438	457	18
237	475	493	511	530	548	566	585	603	621	639	18
238	658	676	694	712	731	749	767	785	803	822	18
239	840	858	876	894	912	931	949	967	985	*003	18
240	38 021	039	057	075	093	112	130	148	166	184	18
241	202	220	238	256	274	292	310	328	346	364	18
242	. 382	309	417	435	453	471	489	507	525	543	18
243	561	578	596	614	632	650	668	686	703	721	18
244	739	757	775	792	810	828	846	863	881	899	18
245	917	934	952	970	987	*005	*023	*041	*058	*076	18
246	39 094	111	129	146	164	182	199	217	235	252	18
247	270	287	305	322	340	358	375	393	410	428	18
248	445	463	480	498	515	533	550	568	585	602	18
249	620	637	655	672	690	707	724	742	759	777	17
250	794	811	829	846	863	881	898	915	933	950	17
251	967	985	*002	*019	*037	*054	*071	*088	*106	*123	17
252	40 140	157	175	192	209	226	243	261	278	295	17
253	312	329	346	364	381	398	415	432	449	466	17
254	483	500	518	535	552	569	586	603	620	637	17
255	654	671	688	705	722	739	756	773	790	807	17
256	824	841	858	875	892	909	926	943	960	976	17
257	993	*010	*027	*044	*061	*078	*095	*111	*128	*145	17
258	41 162	179	196	212	229	246	263	280	296	313	17
259	330	347	363	380	397	414	430	447	464	481	17
260	497	514	531	547	564	581	597	614	631	647	17
261	664	681	697	714	731	747	764	780	797	814	17
262	830	847	863	880	896	913	929	946	963	979	16
263	996	*012	*029	*045	*062	*078	*095	*111	*127	*144	16
264	42 160	177	193	210	226	243	259	275	292	308	16
265	325	341	357	374	390	406	423	439	455	472	16
266	488	504	521	537	553	570	586	602	619	635	16
267	651	667	684	700	716	732	749	765	781	797	16
268	813	830	846	862	878	894	911	927	943	959	16
269	975	991	*008	*024	*040	*056	*072	*088	*104	*120	16
N	0	1	2	3	4	5	6	7	8	9	D

N	0	1	2	3	4	5	6	7	8	9	D
270	43 136	152	169	185	201	217	233	249	265	281	16
271	297	313	329	345	361	377	393	409	425	441	16
273	457	473	489	505	521	537	553	569	584	600	16
273	616	632	648	664	680	696	712	727	743	759	16
274	775	791	807	823	838	854	870	886	902	917	16
275	933	949	965	981	996	*012	*028	*044	*059	*075	16
276	44 091	107	122	138	154	170	185	201	217	232	16
277	248	264	279	$\frac{295}{451}$ 607	311	326	342	358	373	389	16
278	404	420	436		467	483	498	514	529	545	16
279	560	576	592		623	638	654	669	685	700	16
280	716	731	747	762	778	793	809	824	840	855	15
281	871	886	903	917	932	948	963	979	994	*010	15
282	45 025	040	056	071	086	102	117	133	148	163	15
283	179	194	209	225	240	255	271	286	301	317	15
284	332	347	369	378	393	408	423	439	454	469	15
285	484	500	515	530	545	561	576	591	606	621	15
286	637	652	667	683	697	712	728	743	758	773	15
287	788	803	818	834	849	864	879	894	909	924	15
288	939	954	969	984	*000	*015	*030	*045	*060	*075	15
289	46 090	105	120	135	150	165	180	195	210	225	15
290	240	255	270	285	300	315	330	345	359	374	15
291	389	404	419	434	449	464	479	494	509	523	15
292	538	553	568	583	598	613	627	642	657	672	15
293	687	702	716	731	746	761	776	790	805	820	15
294	835	850	864	879	894	909	923	938	953	967	15
295	982	997	*012	*026	#041	*056	*070	*085	*100	*114	15
296	47 129	144	159	173	188	203	217	232	246	261	15
297	276	290	30 5	319	334	349	363	378	392	407	15
298	422	436	451	465	480	494	509	524	538	553	15
299	567	582	596	611	625	640	654	669	683	698	15
300	713	727	741	756	770	784	799	813	828	842	14
301	857	871	855	900	914	929	943	958	972	986	14
302	48 001	015	029	044	058	073	087	101	116	130	14
303	144	159	173	187	202	216	250	244	259	27 3	14
304	287	302	316	330	344	359	373	387	401	416	14
305	430	444	458	473	487	501	515	530	544	558	14
306	572	586	601	615	629	643	657	671	686	700	14
307	714	728	742	756	770	785	799	813	827	841	14
308	855	869	883	897	911	906	940	954	968	982	14
309	996	*010	*024	*038	*052	*066	*080	*094	*108	*122	14
N	0	1	2	3	4	5	6	7	8	9	D

N	o	1	2	3	4	5	6	7	8	9	D
310	49 136	150	164	178	192	206	220	234	248	263	14
311	276	290	304	318	332	346	360	374	388	402	14
312	415	429	443	457	471	485	499	513	527	541	14
313	554	568	582	596	610	624	638	651	665	679	14
314	693	707	721	734	748	762	776	790	803	817	14
315	831	845	859	872	886	900	914	927	941	955	14
316	969	982	996	*010	*024	*037	*051	*065	*079	*092	14
317	50 106	120	133	147	161	174	188	202	215	229	14
318	243	256	270	284	297	311	325	338	352	365	14
319	379	393	406	420	433	447	461	474	488	501	14
320	515	529	542	556	569	583	596	610	623	637	14
321	651	664	678	691	705	718	732	745	759	772	14
323	786	799	813	826	840	853	866	880	893	907	13
323	920	934	947	961	974	987	*001	*014	*028	*041	13
324	51 055	068	081	095	108	121	135	148	102	175	13
325	188	202	215	238	242	255	268	282	195	308	13
326	322	335	348	362	375	388	402	415	428	441	13
327	455	468	481	495	508	521	534	548	561	574	13
328	587	601	614	627	640	654	667	680	693	706	13
329	720	733	746	759	772	786	799	812	825	838	13
330	851	865	878	891	904	917	930	943	957	970	13
331	983	996	*009	*022	*035	*048	*061	*075	*088	*101	13
339	52 114	127	140	153	166	179	192	205	218	231	13
333	244	257	270	284	297	310	323	336	349	362	13
334	375	388	401	414	427	440	453	466	479	492	13
335	504	517	530	543	556	569	582	595	608	621	13
336	634	647	660	673	686	699	711	724	737	750	13
337	763	776	789	802	815	827	840	853	866	879	13
338	892	905	917	930	943	956	969	982	994	*007	13
339	53 020	033	046	058	071	084	697	110	122	135	13
340	148	161	173	186	199	212	224	237	250	263	13
341	275	288	301	314	326	339	359	364	377	390	13
342	403	415	428	441	453	466	479	491	504	517	13
343	529	542	555	567	580	593	605	618	631	643	13
344	656	668	681	694	706	719	732	744	757	769	13
345	782	794	807	820	832	845	857	870	852	895	13
346	908	920	933	945	958	970	983	995	*008	*020	13
347	54 033	045	058	070	083	095	108	120	133	145	13
348	158	170	183	195	208	220	233	245	258	270	12
349	283	295	307	320	332	345	357	370	382	394	12
N	0	1	2	3	4	5	6	7	8	9	D

N	0	1	2	3	4	5	6	7	8	9	D
350	407	419	432	444	456	469	481	494	506	518	12
351	531	543	555	568	580	593	605	617	630	642	12
352	654	667	679	691	704	716	728	741	753	765	12
353	777	790	802	814	827	839	851	864	876	888	12
354	900	913	925	937	949	962	974	986	998	*011	12
355	55 023	035	047	060	072	084	096	108	121	133	12
356	145	157	169	182	194	206	218	230	242	255	12
357	267	279	291	303	315	328	340	352	364	376	12
358	388	400	413	425	437	449	461	473	485	497	12
359	509	522	534	546	558	570	582	594	606	618	12
360	630	643	654	666	678	691	703	715	727	739	12
361	751	763	775	787	799	811	823	835	847	859	12
362	871	883	895	907	919	931	943	955	967	979	12
363	991	*003	*015	#027	*038	*050	*062	*074	*086	*098	12
364	56 110	122	134	146	158	170	182	194	205	217	12
365	229	241	253	265	277	289	301	312	324	336	12
366	348	360	372	384	396	407	419	431	443	455	12
367	467	478	490	502	514	526	538	549	561	573	12
368	585	597	608	620	632	644	656	667	679	691	12
369	703	714	726	738	750	761	773	785	797	808	12
370	820	832	844	855	867	879	891	902	914	926	12
371	937	949	961	972	984	996	*008	*019	*031	*043	12
372	57 054	066	078	089	101	113	124	136	148	159	12
373	171	183	194	206	217	229	241	252	264	276	12
374	287	299	310	323	334	345	357	368	380	392	12
375	403	415	426	438	449	461	473	484	496	507	12
376	519	530	542	553	565	576	588	600	611	623	12
377	634	646	657	669	680	692	703	715	726	738	11
378	749	761	772	784	795	807	818	830	841	852	11
379	864	875	887	898	910	921	933	944	955	967	11
380	978	990	*001	*013	*024	*035	*047	*058	*070	*081	11
381	58 092	104	115	127	138	149	161	172	184	195	11
382	206	218	229	240	252	263	274	286	297	309	11
383	320	331	343	354	365	377	388	399	410	422	11
384	433	444	456	467	478	490	501	512	524	535	11
385	546	557	569	580	591	602	614	625	636	647	11
386	659	670	681	692	704	715	726	737	749	760	11
387	771	782	794	805	816	827	838	850	861	972	11
388	883	894	906	917	928	939	950	961	973	984	11
389	995	\$063	*017	*028	*040	*051	*062	*073	*084	*095	11
N	0	1	2	3	4	5	6	7	8	9	D

N	0	1	2	3	4	5	6	7	8	9	D
390	59 106	118	129	140	151	162	173	184	195	207	11
391	218	229	240	251	262	273	284	295	306	318	11
392	329	340	351	362	373	384	395	406	417	428	11
393	439	450	461	472	483	494	506	517	528	539	11
394	550	561	572	583	594	605	616	627	638	649	11
395	660	671	682	693	704	715	726	737	748	759	11
396	770	780	791	802	813	824	835	846	857	868	11
397	879	890	901	912	923	934	945	956	966	977	11
398	988	999	*010	*021	*032	*043	*054	*065	*076	*086	11
399	60 097	108	119	130	141	152	163	173	184	195	11
400	206	217	228	239	249	260	271	282	293	304	11
401	314	325	336	347	358	369	379	390	401	412	11
402	423	433	444	455	466	477	487	498	509	520	11
403	531	541	552	563	574	584	595	606	617	627	11
404	638	649	660	670	681	692	703	713	724	735	11
405	746	756	767	778	788	799	810	821	831	842	11
406	853	863	874	885	895	906	917	927	938	949	11
407	959	970	981	991	*002	*013	*023	*034	*045	*055	11
408	61 066	077	087	098	109	119	130	140	151	162	11
409	172	183	194	204	215	225	236	247	257	268	11
410	278	289	300	310	321	331	342	352	363	374	11
411	384	395	405	416	426	437	448	458	469	479	11
412	490	500	511	521	532	542	553	563	574	584	11
413	595	606	616	627	637	648	658	669	679	690	11
414	700	711	721	731	742	752	763	773	784	794	10
415	805	815	826	836	847	857	868	878	888	899	10
416	909	920	930	941	951	962	972	982	993	*003	10
417	62 014	024	034	045	055	$066 \\ 170 \\ 273$	076	086	097	107	10
418	118	128	138	149	159		180	190	201	211	10
419	221	232	242	252	263		284	294	304	315	10
420	325	335	346	356	366	377	387	397	408	418	10
421	428	439	449 552 655	459	469	480	490	500	511	521	10
422	531	542		562	572	583	593	603	613	624	10
423	634	644		665	675	685	696	706	716	726	10
424	737	747	757	767	778	788	798	808	818	829	10
425	839	849	859	870	880	890	900	910	921	931	10
426	941	951	961	972	982	992	*002	*012	*022	*033	10
427 428 429	63 043 144 246	$053 \\ 155 \\ 256$	$063 \\ 165 \\ 266$	073 175 276	083 185 286	094 195 296	104 205 306	114 215 317	124 225 327	134 236 337	10 10 10
N	0	1	2	3	4	5	6	7	8	9	D

N	0	1	2	3	4	5	6	7	8	9	D
430	347	357	367	377	387	297	407	417	428	438	10
431	448	458	468	478	488	498	508	518	528	538	10
432	548	558	568	579	589	599	609	619	629	639	10
433	649	659	669	679	689	699	709	719	729	739	10
434	749	759	769	779	789	799	809	819	829	839	10
435	849	859	869	879	889	899	909	919	929	939	10
436	949	959	969	979	988	998	*008	*018	#028	*038	10
437	64 048	058	068	078	088	098	108	118	128	137	10
438	147	157	167	177	187	197	207	217	227	237	10
439	246	256	266	276	286	296	306	316	326	335	10
440	345	355	365	375	385	395	404	414	424	434	10
441	414	454	464	473	483	493	503	513	523	532	10
442	542	552	562	572	582	591	601	611	621	631	10
443	640	650	660	670	680	689	699	709	719	729	10
444	738	748	758	768	777	787	797	807	816	826	10
445	836	846	856	865	875	885	895	904	914	924	10
446	933	943	953	963	972	982	992	*002	*011	*021	10
447	65 031	040	050	060	070	079	089	099	108	118	10
448	128	137	147	157	167	176	186	196	205	215	10
449	225	234	244	254	263	273	283	292	302	312	10
450	321	331	341	350	360	369	379	389	398	408	10
451	418	427	437	447	456	466	475	485	495	504	10
452	514	523	535	543	552	562	571	581	591	600	10
453	610	619	629	639	648	658	667	677	686	696	10
454	706	715	725	734	744	753	763	772	782	792	9 9
455	801	811	820	830	839	849	858	868	877	887	
456	896	906	916	925	935	944	954	963	973	982	
457	992	*001	*011	*020	*030	*039	*049	*058	*068	*077	9 9
458	66 087	096	106	115	124	134	143	153	162	172	
459	181	191	200	210	219	229	238	247	257	266	
460	276	285	295	304	314	323	332	342	351	361	9
461	370	380	389	398	408	417	427	436	445	455	9
462	464	474	483	492	502	511	521	530	539	549	9
463	558	567	577	586	596	605	614	624	633	642	9
464	652	661	671	680	689	699	708	717	727	756	9
465	745	755	764	773	783	792	801	811	820	829	9
466	839	848	857	367	876	885	894	904	913	922	9
467	932	941	950	960	969	978	987	997	*006	*015	9
468	67 025	034	043	052	062	071	080	089	099	108	9
469	117	127	136	145	154	164	173	182	191	201	9
N	0	1	2	3	4	5	6	7	8	9	D

N	0	1	2	3	4	5	6	7	8	9	D
470	210	219	228	237	247	256	265	274	284	293	9
471	302	311	321	330	339	348	357	367	376	385	9 9
472	394	403	413	422	431	440	449	459	468	477	
473	486	495	504	514	523	532	541	550	560	569	
474	578	587	596	605	614	624	633	642	651	660	9
475	669	679	688	697	706	715	724	733	742	752	9
476	761	770	779	788	797	806	815	825	834	843	9
477	852	861	870	879	888	897	906	916	925	934	9 9
478	943	952	961	970	979	988	997	*006	*015	*024	
479	68 034	043	052	061	070	079	088	097	106	115	
480	124	133	142	151	160	169	178	187	196	205	9
481	215	224	233	242	251	260	269	278	287	296	9
483	305	314	323	332	341	350	359	368	377	386	9
483	395	404	413	422	431	440	449	458	467	476	9
484	485	494	502	511	520	529	538	547	556	565	9
485	574	583	592	601	610	619	628	637	646	655	9
486	664	673	681	690	699	708	717	726	735	744	9
487	753	762	771	780	789	797	806	815	824	833	9
488	842	851	860	869	878	886	895	904	913	922	9
489	931	940	949	958	966	975	984	993	*002	*011	9
490	69 020	028	037	046	055	064	073	082	090	099	9
491	108	117	126	135	144	152	161	170	179	188	9
493	197	205	214	223	232	241	249	258	267	276	9
493	285	294	302	311	320	329	338	346	355	364	9
494	373	381	390	399	408	417	425	434	443	452	9
495	461	469	478	487	496	504	513	522	531	539	9
496	548	557	566	574	583	592	601	609	618	627	9
497 498 499	636 723 810	644 732 819	653 740 827	662 749 836	671 758 845	679 767 854	688 775 863	697 784 871	705 793 880	714 801 888	9 9
500	897	906	914	923	932	940	949	958	966	975	9
501	984	992	*001	*010	*018	*027	*036	*044	*053	*062	9
502	70 070	079	088	096	105	114	122	131	140	148	9
503	157	165	174	183	191	200	209	217	226	234	9
504	243	252	260	269	278	286	295	303	312	321	9
505	329	338	346	355	364	372	381	389	398	406	9
506	415	424	432	441	449	458	467	475	484	492	9
507	501	509	518	526	535	544	552	561	569	578	9
508	586	595	603	612	621	629	638	646	655	663	9
509	672	680	689	697	706	714	723	731	740	749	9
N	0	1	2	3	4	5	6	7	8	9	D

N	0	1	2	3	4	5	6	7	8	9	D
510	757	766	774	783	791	800	808	817	825	S34	9
511	842	851	859	868	876	885	893	902	910	919	9
512	927	935	944	952	961	969	978	986	995	*003	9
513	71 012	020	029	037	046	054	063	071	079	088	8
514	096	105	113	122	130	139	147	155	164	172	8
515	181	189	198	206	214	223	231	240	248	257	8
516	265	273	282	290	299	307	315	324	332	341	8
517	349	357	366	374	383	391	399	408	416	425	8 8
518	433	441	450	458	466	475	483	492	500	508	
519	517	525	533	542	550	559	567	575	584	592	
520	600	609	617	625	634	642	650	659	667	675	8
521	684	692	700	709	717	725	734	742	750	759	8 8
522	767	775	784	792	800	809	817	825	834	842	
523	850	858	867	875	883	892	900	908	917	925	
524	933	941	950	958	966	975	983	991	999	*008	8 8
525	72 016	024	032	041	049	057	066	074	082	090	
526	099	107	115	123	132	140	148	156	165	173	
527	181	189	198	206	214	222	230	239	247	255	8 8
528	263	272	280	288	296	304	313	321	329	337	
529	346	354	362	370	378	387	395	403	411	419	
530	428	436	444	452	460	469	477	485	493	501	8
531	509	518	526	534	542	550	558	567	575	583	8
532	591	599	607	616	624	632	640	648	656	665	8
533	673	681	689	697	705	713	722	730	738	746	8
534	754	762	770	779	787	795	803	811	819	827	8
535	835	843	852	860	868	876	884	892	900	908	8
536	916	925	933	941	949	957	965	973	981	989	8
537 538 539	997 73 078 159	*006 086 167	*014 094 175	*022 102 183	*030 111 191	*038 119 199	*046 127 207	*054 135 215	*062 143 223	*070 151 231	8 8
540	239	247	255	263	272	280	288	296	304	312	8
541	320	328	336	344	352	360	368	376	384	392	8 8
549	400	408	416	424	432	440	448	456	464	472	
543	480	488	496	504	512	520	528	536	544	552	
544	560	568	576	584	592	600	608	616	624	632	8
545	640	648	656	664	672	679	687	695	703	711	8
546	719	727	735	743	751	759	767	775	783	791	8
547	799	807	815	823	830	838	846	854	862	870	8 8
548	878	886	894	902	910	918	926	933	941	949	
549	957	965	973	981	989	997	*005	*013	*020	*028	
N	0	1	2	3	4	5	6	7	8	9	D

N	0	1	2	3	4	5	6	7	8	9	D
550	74 036	044	052	060	068	076	084	092	099	107	8
551	115	123	131	139	147	155	162	170	178	186	8
552	194	202	210	218	225	233	241	249	257	265	8
553	273	280	288	296	304	312	320	327	335	343	8
554	351	359	367	374	382	390	398	406	414	421	8 8
555	429	437	445	453	461	468	476	484	492	500	
556	507	515	523	531	539	547	554	562	570	578	
557	586	593	601	609	617	624	632	640	648	656	8
558	663	671	679	687	695	702	710	718	726	733	8
559	741	749	757	764	772	780	788	796	803	811	8
560	819	827	834	842	850	858	865	873	881	889	8
561	896	904	912	920	927	935	943	950	958	966	8
562	974	981	989	997	*005	*012	*020	*028	*035	*043	8
563	75 051	059	066	074	082	089	097	105	113	120	8
564	128	136	143	151	159	166	174	182	189	197	8
565	205	213	220	228	236	243	251	259	266	274	8
566	282	289	297	305	312	320	328	335	343	351	8
567	358	366	374	381	389	397	404	412	420	427	8
568	435	442	450	458	465	473	481	488	496	504	8
569	511	519	526	534	542	549	557	565	572	580	8
570	587	595	603	610	618	626	633	641	648	656	8
571	664	671	679	686	694	702	709	717	724	732	8
572	740	747	755	762	770	778	785	793	800	808	8
573	815	823	831	838	846	853	861	868	876	884	8
574	891	899	906	914	921	929	937	944	952	959	8
575	967	974	982	989	997	*005	*012	*020	*027	*035	8
576	76 042	050	057	065	072	080	087	095	103	110	8
577	118	125	133	140	148	155	163	170	178	185	8
578	193	200	208	215	223	230	238	245	253	260	8
579	268	275	283	290	298	305	313	320	328	335	8
580	343	35 0	358	365	373	380	388	395	403	410	8
581	418	425	433	440	448	455	462	470	477	485	7
582	492	500	507	515	522	530	537	545	559	559	7
583	567	574	583	589	597	604	612	619	626	634	7
584	641	649	656	664	671	678	686	693	701	708	7
585	716	723	730	738	745	753	760	768	775	782	7
586	790	797	805	812	819	827	834	842	849	856	7
587	864	871	879	886	893	901	908	916	923	930	7
588	938	945	953	960	967	975	982	989	997	*004	7
589	77 012	019	026	034	041	048	056	063	070	078	7
N	0	1	2	3	4	5	6	7	8	9	D

N	0	1	2	3	4	5	6	7	8	9	D
590	085	093	100	107	115	122	129	137	144	151	7
591	159	166	173	181	188	195	203	210	217	225	7
592	232	240	247	254	262	269	276	283	291	298	7
593	305	313	320	327	335	342	349	357	364	371	7
594	379	386	393	401	408	415	422	430	437	444	7
595	453	459	466	474	481	488	495	503	510	517	7
596	525	532	539	546	554	561	568	576	583	590	7
597	597	605	612	619	627	634	641	648	656	663	7 7 7
598	670	677	685	692	699	-706	714	721	728	735	
599	743	750	757	764	772	779	786	793	801	808	
600	815	822	830	837	844	851	859	866	873	880	7
601	887	895	902	909	916	924	931	938	945	952	7
602	960	967	974	981	988	996	*003	*010	*017	*025	7
603	78 002	039	046	653	061	068	075	082	089	697	7
604	104	111	118	125	132	140	147	154	161	168	7
605	176	183	190	197	204	211	219	226	233	240	7
606	247	254	262	269	276	283	290	297	305	312	7
607	319	326	333	340	347	355	362	369	376	383	7 7 7
608	390	398	405	412	419	426	433	440	447	455	
609	462	469	476	483	490	497	504	512	519	526	
610	5 33	540	547	554	561	569	576	583	590	597	7
611	604	611	618	625	633	640	647	654	661	668	7 7 7
612	675	682	689	696	704	711	718	725	732	739	
613	746	753	760	767	774	781	789	796	803	810	
614	817	824	831	838	845	852	859	866	873	880	777
615	888	895	902	909	916	923	930	937	944	951	
616	958	965	972	979	986	993	*000	*007	*014	#021	
617	79 029	036	043	050	057	064	071	078	085	092	7 7 7
618	099	106	113	120	127	134	141	148	155	162	
619	169	176	183	190	197	204	211	218	225	232	
620	239	246	253	260	267	274	281	288	295	302	7
621	309	316	323	330	337	344	351	358	365	372	7 7 7
622	379	3×6	393	400	407	414	421	428	435	442	
623	449	456	463	470	477	484	491	498	505	511	
624	518	525	532	539	546	553	560	567	574	581	7
625	588	595	602	609	616	623	630	637	644	650	7
626	657	664	671	678	685	692	699	706	713	720	7
627	727	734	741	748	754	761	768	775	782	789	7 7
628	796	803	810	817	824	831	837	844	851	858	
629	865	872	879	886	893	900	906	913	920	927	
N	0	1	2	3	4	5	6	7	8	9	D

				1			l .	ī	1	i	
N	0	1	2	3	4	5	6	7	8	9	D
630	934	941	948	955	962	969	975	982	989	996	7
631	80 003	010	017	024	030	037	044	051	058	$065 \\ 134 \\ 202$	7
632	072	079	085	092	099	106	113	120	127		7
633	140	147	154	161	168	175	182	188	195		7
634	209	216	223	229	236	243	250	257	264	271	7
635	277	284	291	298	305	312	318	325	332	339	7
636	346	353	359	366	373	380	387	393	400	407	7
637	414	421	428	434	441	448	455	462	468	475	7
638	482	489	496	502	509	516	523	530	536	543	7
639	550	557	564	570	577	584	591	598	604	611	7
640	618	625	632	638	645	652	659	665	672	679	7
641	686	693	699	706	713	720	726	733	740	747	7
642	754	760	767	774	781	787	794	801	808	814	7
643	821	828	835	841	848	855	862	868	875	882	7
644	889	895	902	909	916	922	929	936	943	949	7
645	956	963	969	976	983	990	996	*003	*010	*017	7
646	81 023	030	037	043	050	057	064	070	077	C84	7
647	090	$097 \\ 164 \\ 231$	104	111	117	124	131	137	144	151	7
648	158		171	178	184	191	198	204	211	218	7
649	224		238	245	251	258	265	271	278	285	7
650	291	298	305	311	318	325	331	338	345	351	7
651	358	365	371	378	385	391	398	405	411	418	7
652	425	431	438	445	451	458	465	471	478	485	7
653	491	498	505	511	518	525	531	538	544	551	7
654	558	564	571	578	584	591	598	604	611	617	7
655	624	631	637	644	651	657	664	671	677	684	7
656	690	697	704	710	717	723	730	737	743	750	7
657	757	763	770	776 /	783	790	796	803	809	816	777
658	823	829	836	842	849	856	862	869	875	882	
659	889	895	902	908	915	921	928	935	941	948	
660	954	961	968	974	981	987	994	*000	*007	*014	7
661	82 020	027	033	040	046	053	060	066	073	079	777
662	086	092	099	105	112	119	125	132	138	145	
663	151	158	164	171	178	184	191	197	204	210	
664	217	223	230	236	243	249	256	263	269	276	7
665	282	289	295	302	308	315	321	328	334	341	7
666	347	354	360	367	373	380	387	393	400	406	7
667	413	419	426	432	439	445	452	458	465	471	7
668	478	484	491	497	504	510	517	523	530	536	7
669	543	549	556	562	569	575	582	588	595	601	7
N	0	1	2	3	4	5	6	7	8	9	D

N	0	1	2	3	4	5	6	7	8	9	D
670	607	614	620	627	633	640	646	653	659	666	7
671	672	679	685	692	698	705	711	718	724	730	6
672	737	743	750	756	763	769	776	782	789	795	6
673	802	808	814	821	827	834	840	847	853	860	6
674	866	872	879	885	892	898	905	911	918	924	6
675	930	937	943	950	956	963	969	975	982	988	6
676	995	*001	*008	#014	*020	*027	*033	*040	*046	*052	6
677	83 059	065	072	078	085	091	097	104	110	117	6
678	123	129	136	142	149	155	161	168	174	181	6
679	187	193	200	206	213	219	225	232	238	245	6
680	251	257	264	270	276	283	289	296	302	308	6
681	315	321	327	334	340	347	353	359	366	372	6
682	378	385	391	398	404	410	417	423	429	436	6
683	442	448	455	461	467	474	480	487	493	499	6
684	506	512	518	525	531	537	544	550	556	563	6
685	569	575	582	588	594	601	607	613	620	626	6
686	632	639	645	651	658	664	670	677	683	689	6
687	696	702	708	715	721	727	734	740	746	753	6
688	759	765	771	778	784	790	797	803	809	816	6
689	822	828	835	841	847	853	860	866	872	879	6
690	885	891	897	904	910	916	923	929	935	942	6
691	948	954	960	967	973	979	985	992	998	*004	6
692	84 011	017	023	029	036	042	048	055	661	067	6
693	073	080	086	092	098	105	111	117	123	130	6
694	136	142	148	155	161	167	173	180	186	192	6
695	198	205	211	217	223	230	236	242	248	255	6
696	261	267	273	260	286	292	298	305	311	317	6
697	323	330	336	342	348	354	361	367	373	379	6
698	386	392	398	404	410	417	423	429	435	442	6
699	448	454	460	466	473	479	485	491	497	504	6
700	510	516	522	528	535	541	547	553	559	566	6
701	572	578	584	590	597	603	609	615	621	628	6
702	634	640	646	652	658	665	671	677	683	689	6
703	696	702	708	714	720	726	733	739	745	751	6
704	757	763	770	776	782	788	794	800	807	813	6
705	819	825	831	837	844	850	856	862	868	874	6
706	880	887	893	899	905	911	917	924	930	936	6
707 708 709	942 85 003 065	948 009 071	954 016 077	960 022 083	967 028 089	973 034 095	979 040 101	985 046 107	991 052 114	997 058 120	6 6
N	0	1	2	3	4	5	6	7	8	9	D

N	0	1	2	3	4	5	6	7	8	9	D
710	126	132	138	144	150	156	163	169	175	181	6
711	187	193	199	205	211	217	224	230	236	242	6
719	248	254	260	266	272	278	285	291	297	303	6
713	309	315	321	327	333	339	345	352	358	364	6
714	370	376	382	388	394	400	406	412	418	425	6
715	431	437	443	449	455	461	467	473	479	485	6
716	491	497	503	509	516	522	528	534	540	546	6
717 718 719	552 612 673	$\frac{558}{618}$ $\frac{679}{679}$	$564 \\ 625 \\ 685$	570 631 691	576 637 697	582 643 703	588 649 709	594 655 715	600 661 721	606 667 727	6 6 6
720	733	739	745	751	757	763	769	775	781	788	6
721	794	800	806	812	818	824	830	836	842	848	6
723	854	860	866	872	878	884	890	896	902	908	6
723	914	920	926	932	938	944	950	956	962	968	6
724	974	980	986	992	998	$004 \\ 064 \\ 124$	*010	*016	*022	*028	6
725	86 034	040	046	052	058		070	076	082	088	6
726	094	100	106	112	118		130	136	141	147	6
727	153	159	165	171	177	183	189	195	201	207	6
728	213	219	225	231	237	243	249	255	261	267	6
729	273	279	285	291	297	303	308	314	320	326	6
730	332	338	344	350	356	362	368	374	380	386	6
731	392	398	404	410	415	421	427	433	439	445	6
732	451	457	463	469	475	481	487	493	499	504	6
733	510	516	522	528	534	540	546	552	558	564	6
734	570	576	581	587	593	599	605	611	617	623	6
735	629	635	641	646	652	658	664	670	676	682	6
736	688	694	700	705	711	717	723	729	735	741	6
737	747	753	759	764	770	776	782	788	794	800	6
738	806	812	817	823	829	835	841	847	853	859	6
739	864	870	876	882	888	894	900	906	911	917	6
740	923	929	935	941	947	953	958	964	970	976	6
741	982	$\frac{988}{046}$ $10\bar{5}$	994	999	*005	*011	*017	*023	*029	*035	6
742	87 040		053	058	064	070	075	081	087	093	6
743	099		111	116	122	128	134	140	146	151	6
744 745 746	157 216 274	163 221 2 80	169 227 286	175 233 291	181 239 297	186 245 303	192 251 309	198 256 315	204 262 320	210 268 326	6 6
747	332	338	344	349	355	361	367	373	379	384	6
748	390	396	402	408	413	419	425	431	437	442	6
749	448	454	460	466	471	477	483	489	495	500	6
N	0	1	2	3	4	5	6	7	8	9	D

N	0	1	2	3	4	5	6	7	8	9	D
750	506	512	518	523	529	535	541	547	552	558	6
751	564	570	576	581	587	593	599	604	610	616	6
752	622	628	633	639	645	651	656	662	668	674	6
753	679	685	691	697	703	708	714	720	726	731	6
754	737	743	749	754	760	766	772	777	783	789	6 6
755	795	800	806	812	818	823	829	835	841	846	
756	85 2	858	864	869	875	881	887	892	898	904	
757	910	915	921	927	953	938	944	950	955	961	6
758	967	973	978	984	990	996	*001	*007	*013	*018	6
759	88 024	030	036	041	047	053	058	064	070	076	6
760	081	087	093	098	104	110	116	121	127	133	6
761	108	144	150	156	161	167	175	178	184	190	6
762	195	201	207	213	218	224	230	235	241	247	6
763	252	258	264	270	275	281	287	292	298	304	6
764	309	315	321	326	382	338	343	349	355	360	6
765	366	372	377	383	389	395	400	406	412	417	
766	423	429	434	440	446	451	457	463	468	474	
767	480	485	491	497	502	508	513	519	525	530	6
768	536	542	547	553	559	564	570	576	581	587	
769	593	598	604	610	615	621	627	632	638	643	
770	649	655	660	666	672	677	683	689	694	700	6
771	705	711	717	722	728	794	709	745	750	756	6
772	762	767	773	779	784	790	705	801	807	812	6
773	818	824	829	835	840	846	852	857	863	868	6
774 775 776	874 930 986	880 936 992	885 941 997	891 947 *003	897 953 *009	902 958 *014	908 964 *020	913 969 *025	919 975 *031	925 981 *037	6 6
777	89 042	048	053 109 165	059	064	070	076	081	087	092	6
778	098	104		115	120	126	131	137	143	148	6
779	154	159		170	176	182	187	193	198	204	6
780	209	215	221	226	232	237	243	248	254	260	6
781	265	271	276	282	287	293	298	304	310	315	6
783	321	326	332	337	343	348	354	360	365	371	6
783	376	382	387	393	398	404	409	415	421	426	6
784	432	437	443	448	454	459	465	470	476	481	6
785	487	492	498	504	509	515	520	526	531	537	6
786	542	548	553	559	564	570	575	581	586	592	6
787	597	603	609	614	620	625	631	636	642	647	6
788	653	658	664	669	675	680	686	691	697	702	6
789	708	713	719	724	730	735	741	746	752	757	6
N	0	1	2	3	4	5	6	7	8	9	D

N	0	1	2	3	4	5	6	7	8	9	D
790	763	768	774	779	785	790	796	801	807	812	5
791	818	823	829	834	840	845	851	856	862	867	5
792	873	878	883	889	894	900	905	911	916	922	5
793	927	933	938	944	949	955	960	966	971	977	5
794	982	988	993	998	*004	*009	*015	$^{*020}_{07\bar{5}}_{129}$	*026	*031	5
795	90 037	042	048	053	059	064	069		080	086	5
796	091	097	102	108	113	119	124		135	140	5
797	146	151	157	162	168	173	179	184	189	195	5
798	200	206	211	217	222	227	233	238	244	249	5
799	255	260	266	271	276	282	287	293	298	304	5
800	309	314	320	325	331	336	342	347	352	358	5
801	363	369	374	380	385	390	396	401	407	412	5
802	417	423	428	434	439	445	450	455	461	466	5
803	472	477	482	488	493	499	504	509	515	520	5
804	526	531	536	542	547	553	558	563	569	574	5
805	580	585	590	596	601	607	612	617	623	628	5
806	634	639	644	650	655	660	666	671	677	682	5
807	687	693	698	703	709	714	720	725	730	736	5
808	741	747	752	757	763	768	773	779	784	789	5
809	795	800	806	811	816	822	827	832	838	843	5
810	849	854	859	865	870	875	881	886	891	897	5
811	902	907	913	918	924	929	934	940	945	950	5 5 5
812	956	961	966	972	977	982	988	993	998	*004	
813	91 009	014	020	025	030	036	041	046	052	057	
814 815 816	062 116 169	068 121 174	073 126 180	$078 \\ 132 \\ 185$	084 137 190	-089 142 196	094 148 201	100 153 206	105 158 212	110 164 217	5 5 5
817	222	228	233	238	243	249	254	259	265	270	5 5 5
818	275	281	286	291	297	302	307	312	318	323	
819	328	334	339	344	350	355	360	365	371	376	
820	381	387	393	397	403	408	413	418	424	429	5
821	434	440	445	450	455	461	466	471	477	482	5 5 5
822	487	492	498	503	508	514	519	524	529	535	
823	540	545	551	556	561	566	572	577	582	587	
824	593	598	603	609	614	619	624	630	635	640	5
825	645	651	656	661	666	672	677	682	687	693	5
826	698	703	709	714	719	724	730	735	740	745	5
827	751	756	761	766	772	777	782	787	793	798	5
828	803	808	814	819	824	829	834	840	845	850	5
829	855	861	866	871	876	882	887	892	897	903	5
И	0	1	2	3	4	5	6	7	8	9	D

N	0	1	2	3	4	5	6	7	8	9	D
830	908	913	918	924	929	934	939	944	950	955	5
831	960	965	971	976	981	986	991	997	*002	*007	5
832	92 012	018	023	028	033	038	044	049	054	059	5
833	065	070	075	080	085	091	096	101	106	111	5
834	117	122	127	132	137	143	148	153	158	163	5
835	169	174	479	184	189	195	200	205	210	215	5
836	221	226	231	236	241	247	252	257	262	267	5
837	273	278	283	288	293	298	304	309	314	319	5
838	324	330	335	340	345	350	355	361	366	371	5
839	376	381	387	392	397	402	407	412	418	423	5
840	428	433	438	443	449	454	459	464	469	474	5
841	480	485	490	495	500	505	511	516	521	526	5
842	531	536	542	547	552	557	562	567	572	578	5
843	583	588	593	598	603	609	614	619	624	629	5
844	634	639	645	650	655	660	665	670	675	681	5
845	686	691	696	701	706	711	716	722	727	732	5
846	737	742	747	752	758	763	768	773	778	783	5
847	788	793	799	804	809	814	819	824	829	\$34	5
848	840	845	850	855	860	865	870	875	881	886	5
849	891	896	901	906	911	916	921	927	932	937	5
850	942	947	952	957	962	967	973	978	983	988	5
851	993	998	*003	*008	*013	*018	*024	*029	*034	*039	5
852	93 044	049	054	059	064	069	075	080	085	090	5
853	095	100	105	110	115	120	125	131	136	141	5
854	146	151	156	161	166	171	176	181	186	192	5
855	197	202	207	212	217	222	227	232	237	242	5
856	247	252	258	263	268	273	278	283	288	293	5
857	298	303	308	313	318	323	328	334	339	344	5
858	349	354	359	364	369	374	379	384	389	394	5
859	399	404	409	414	420	425	430	435	440	445	5
860	450	455	460	465	470	475	480	485	490	495	5
861	500	505	510	515	520	526	531	536	541	546	5
862	531	556	561	566	571	576	581	586	591	596	5
863	601	606	611	616	621	626	631	636	641	646	5
864	651	656	661	666	671	676	682	687	692	697	5
865	702	707	712	717	722	727	732	737	742	747	5
866	752	757	763	767	772	777	782	787	792	797	5
867	802	807	812	817	822	827	832	837	842	847	5
868	852	857	862	867	872	877	882	887	892	897	5
869	902	907	912	917	922	927	932	937	942	947	5
N	0	1	2	3	4	5	6	7	8	9	D

N	0	1	2	3	4	5	6	7	8	9	D
870	952	957	962	967	972	977	982	987	992	997	5
871	94 002	$007 \\ 057 \\ 106$	012	017	022	027	032	037	042	047	5
872	052		062	067	072	077	082	086	091	096	5
873	101		111	116	121	126	131	136	141	146	5
874	151	156	161	166	171	176	181	186	191	196	5
875	201	206	211	216	221	226	231	236	249	245	5
876	250	255	260	265	270	275	280	285	290	295	5
877	300	305	310	315	320	325	330	335	340	345	5 5 5
878	349	354	359	364	369	374	379	384	389	394	
879	399	404	409	414	419	424	429	433	438	443	
880	448	453	458	463	468	473	478	483	488	493	5
881	498	503	507	512	517	522	527	532	537	542	5
882	547	552	557	562	567	571	576	581	586	591	5
883	596	601	606	611	616	621	626	630	635	640	5
884	645	650	655	660	665	670	675	680	685	689	5
885	694	699	704	709	714	719	724	729	734	738	5
886	743	748	753	758	763	768	773	778	783	787	5
887	792	797	862	807	812	817	822	\$27	832	836	5
888	841	846	851	856	861	866	871	876	880	885	5
889	890	895	900	905	910	915	919	924	929	934	5
890	939	944	949	954	959	963	968	973	978	983	5
891	988	993	998	*002	*007	*012	*017	*022	*027	*032	5
892	95 036	041	046	051	056	061	066	071	075	080	5
893	085	090	095	100	105	109	114	119	124	129	5
894	134	139	143	148	153	158	163	168	173	177	5
895	182	187	192	197	202	207	211	216	221	226	5
896	231	236	240	245	250	255	260	265	270	274	5
897	279	284	289	294	299	303	308	313	318	323	5
898	328	332	337	342	347	352	357	361	366	371	5
899	376	381	386	390	395	400	405	410	415	419	5
900	424	429	434	439	414	448	453	458	463	468	5
901	472	477	482	487	492	497	501	506	511	516	5
902	521	525	530	535	540	545	550	554	559	564	5
903	569	574	578	583	588	593	598	602	607	612	5
904	617	622	626	631	636	641	646	650	655	660	5
905	665	670	674	679	684	689	694	698	703	708	5
906	713	718	722	727	732	737	743	746	751	756	5
907	761	766	770	775	780	785	789	794	799	804	5
908	809	813	818	823	828	832	837	842	847	852	5
909	856	861	866	871	875	880	885	890	895	899	5
N	0	1	2	3	4	5	6	7	8	9	D

N	0	1	2	3	4	5	6	7	8	9	D
910	904	909	914	918	923	928	933	938	942	947	5
911	952	957	961	966	971	976	980	985	990	995	5
912	999	*004	*009	*014	*019	*023	*028	*033	*038	*042	5
913	96 047	052	057	061	066	071	076	080	085	090	5
914	095	099	104	109	114	118	123	128	133	137	5
915	142	147	152	156	161	166	171	175	180	185	5
916	190	194	199	204	209	213	218	223	227	232	5
917	237	242	246	251	256	261	265	270	275	280	5
918	284	289	294	298	303	308	313	317	322	327	5
919	332	336	341	346	350	355	360	365	369	374	5
920	379	384	388	393	398	402	407	412	417	421	5
921	426	431	435	440	445	450	454	459	464	468	5
922	473	478	483	487	492	497	501	506	511	515	5
923	520	525	530	534	539	544	548	553	558	562	5
924	567	572	577	581	586	591	595	600	605	609	5
925	614	619	624	628	623	638	642	647	652	656	5
926	661	666	670	675	680	685	689	694	699	703	5
927	708	713	717	722	727	731	736	741	745	750	5
628	755	759	764	769	774	778	783	788	792	797	5
929	802	806	S11	816	820	825	830	834	839	844	5
930	848	853	858	862	867	872	876	881	886	890	5
931	895	900	904	909	914	918	923	928	932	937	5
932	942	946	951	956	960	965	970	974	979	984	5
933	988	993	997	*002	*007	*011	*016	*021	*025	*030	5
934	97 035	039	044	049	053	058	063	067	072	077	5
985	081	086	090	095	100	104	109	114	118	123	5
936	128	132	137	142	146	151	155	160	165	169	5
937	174	179	183	188	192	197	202	206	211	216	5
938	220	225	230	234	239	243	248	253	257	262	5
939	267	271	276	280	285	290	294	299	304	308	5
940	313	317	322	327	331	356	340	345	350	354	5
941	359	364	368	373	377	382	387	391	396	400	5
942	405	410	414	419	424	428	433	437	442	447	5
943	451	456	460	465	470	474	479	453	488	493	5
944	497	502	506	511	516	520	525	529	534	539	5
945	543	548	552	557	562	566	571	575	580,	5×5	5
946	589	594	598	603	607	612	617	621	626	630	5
947	635	640	644	649	653	658	663	667	672	676	5
948	681	685	690	695	690	704	708	713	717	722	5
949	727	781	736	740	745	749	754	759	763	768	5
N	0	1	2	3	4	5	6	7	8	9	D

N	0	1	2	3	4	5	6	7	8	9	D
950	772	777	782	786	791	795	800	804	809	813	5
951	818	823	827	832	836	841	845	850	855	859	5
952	864	868	873	877	882	886	891	896	900	905	5
953	909	914	918	923	928	932	987	941	946	950	5
954 955 9 5 6	$98 {000\atop 046}$	959 005 050	964 009 055	$968 \\ 014 \\ 059$	973 019 064	978 023 068	982 028 073	987 032 078	991 087 082	996 041 087	5 5 5
957	091	096	100	105	109	114	118	123	127	132	5
958	137	141	146	150	155	159	164	168	173	177	5
959	182	186	191	195	200	204	209	214	218	223	5
960	227	232	236	241	245	250	254	259	263	268	5
961	272	277	281	286	290	295	299	304	308	313	5
962	318	322	327	331	336	340	345	349	354	358	5
963	363	367	372	376	381	385	390	394	399	403	5
964	408	412	$\frac{417}{462}$ $\frac{507}{}$	421	426	430	435	439	444	448	5
965	453	457		466	471	475	480	484	489	493	4
966	498	502		511	516	520	525	529	534	538	4
967	543	547	552	556	561	565	570	574	579	583	4
968	588	592	597	601	605	610	614	619	623	628	4
969	632	637	641	646	650	655	659	664	668	673	4
970	677	682	686	691	695	700	704	709	713	717	4
971	722	726	731	735	740	744	749	753	758	762	4
972	767	771	776	780	784	789	793	798	802	807	4
973	811	816	820	825	829	834	838	843	847	851	4
974	856	860	865	869	874	878	883	887	892	896	4
975	900	905	909	914	918	923	927	932	936	941	4
976	945	949	954	958	963	967	972	976	981	985	4
977	989	$\frac{994}{038} \\ 083$	998	*003	*007	*012	*016	*021	*025	*029	4
978	99 034		043	047	052	056	061	065	069	074	4
979	078		087	092	096	100	105	109	114	118	4
980	123	127	131	136	140	145	149	154	158	162	4
981	167	171	176	180	185	189	193	198	202	207	4
982	211	216	220	224	229	233	238	242	247	251	4
983	255	260	264	269	273	277	282	286	291	295	4
984	300	304	308	313	317	322	326	330	335	339	4
985	344	348	352	357	361	366	370	374	379	383	4
986	388	392	396	401	405	410	414	419	423	427	4
987	432	436	441	445	449	454	458	463	467	471	4
988	476	480	484	489	493	498	502	506	511	515	4
989	520	524	528	533	537	542	546	550	555	559	4
N	0	1	2	3	4	5	6	7	8	9	D

N	0	1	2	3	4	5	6	7	8	9	D
990	564	568	572	577	581	585	590	594	599	603	4
991	607	612	616	621	625	629	634	638	642	647	4
992	651	656	660	664	669	673	677	682	686	691	4
993	695	699	704	708	712	717	721	726	730	734	4
994	739	743	747	752	756	760	765	769	774	778	4
995	782	787	791	795	800	804	808	813	817	823	4
996	826	830	835	839	843	848	852	856	861	865	4
997	870	874	878	883	887	891	896	900	904	909	4
998	913	917	922	926	930	935	939	944	948	952	4
999	957	961	965	970	974	978	983	987	991	996	4
N	0	1	2	3	4	5	6	7	8	9	D

II.

FIVE-PLACE LOGARITHMS

OF THE

SINE, COSINE, TANGENT, AND COTANGENT

FOR

EACH MINUTE FROM 0° TO 90°.

,	L. Sin.	L. Tan.	L. Cot.	L. Cos.	
0	oc	∞	∞	0.00 000	60
1	6.46 373	6.46 373	3.53 627	0.00 000	59
$\frac{2}{3}$	6.76 476	6.76 476	3.23 524	0.00 000	58
4	6.94 085 7.06 579	6.94 085 7.06 579	3.05 915 2.93 421	0.00 000	57 56
5	7.16 270	7.16 270	2.83 730	0.00 000	55
6	7.24 188	7.24 188	2.75 812	0.00 000	54
7	7.30~882	7.30 882	2.69 118	0.00 000	53
8	7.36682	7.36 682	2.63 318	0.00 000	52
9	7.41 797	7.41 797	2.58 203	0.00 000	51
10	7.46 373	7.46 373	2.53 627	0.00 000	50
11	7.50 512	7.50 512	2.49 488	0.00 000	49
12 13	7.54 291 7.57 767	7.54 291 7.57 767	2.45 709	0.00 000	48
14	7.57 767 7.60 985	7.57 767 7.60 986	2.42 233 2.39 014	0.00 000	47
15	7.63 982	7.63 982	2.36 018	0.00 000	45
16	7.66 784	7.66 785	2.33 215	0.00 000	44
17	7.69 417	7.69 418	$2.30\ 582$	9.99 999	43
18	7.71 900	7.71 900	2.28 100	9.99 999	42
19	7.74 248	7.74 248	2.25 752	9,99 999	41
20	7.76 475	7.76 476	2.23 524	9,99 999	40
21	7.78 594	7.78 595	$2.21\ 405$	9.99 999	39
22 23	7.80 615	7.80 615	2.19 385	9.99 999	38
24	7.82 545 7.84 393	7.82 546 7.84 394	2.17 454 2.15 606	9.99 999 9.99 999	37 36
25	7.86 166	7.86 167	2.13 833	9.99 999	35
26	7.87 870	7.87 871	2.12 129	9.99 999	34
27	7.89 509	7.89 510	2.10490	9.99 999	33
28	7.91 088	7.91 089	2.08 911	9.99 999	32
29	7.92 612	7.92 613	2.07 387	9.99 998	31
30	7.94 084	7.94 086	2.05 914	9.99 998	30
31	7.95 508	7.95 510	2.04 490	9.99 998	29
32 33	7.96 887 7.98 223	7.96 889 7.98 225	$2.03\ 111$ $2.01\ 775$	9.99 998 9.99 998	28 27
34	7.99 520	7.99 522	2.00 478	9.99 998	26
35	8.00 779	8.00 781	1,99 219	9.99 998	25
36	8.02 002	8.02 004	1.97 996	9.99 998	24
37	8.03 192	8.03 194	1.96 806	9.99 997	23
38 39	8.04 350 8.05 478	8.04 353 8.05 481	$1.95\ 647$ $1.94\ 519$	9.99 997 9.99 997	22 21
40	8.06 578	8.06 581	1.93 419	9.99 997	20
41	8.07 650	8.07 653	1.92 347	9.99 997	19
42 43	8.08 696 8.09 718	$8.08700 \\ 8.09722$	$1.91\ 300$ $1.90\ 278$	9,99 997 9,99 997	18 17
44	8.10 717	8.10 720	1.89 280	9,99 996	16
45	8.11 693	8.11 696	1.88 304	9,99 996	15
46	8.12 647	8.12 651	1.87 349	9.99 996	14
47	8.13 581	8.13 585	1.86 415	9.99 996 9,99 996	13
48 49	8.14 495 8.15 391	8.14 500 8.15 395	$\frac{1.85\ 500}{1.84\ 605}$	9.09 996	12 11
50	8.16 268	8.16 273	1.83 727	9,99 995	10
51	8.17 128	8.17 133	1.82 867	9.99 995	9
52	8.17 971	8.17 976	1.82 024	9.99 995	8
53	8.18 798	8.18 804	1.81 196	9.99 995	7
54	8.19 610	8.19 616	1.80 384	9.99 995	6
55	8.20 407	8.20 413	1.79 587	9.99 904	5
56 57	8.21 189 8.21 958	8.21 195 8.21 964	1.78 805	9.99 994 9.99 994	3
58	8.22 713	8.22 720	1.78 036 1.77 280	9,99 994	2
59	8.23 456	8.23 462	1.76 538	9.99 994	2
60	8.24 186	8,24 192	1.75 808	9.99 993	0
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	,
			O°		

,	L. Sin.	L, Tan.	L. Cot.	L. Cos.	
0	8.24 186	8.24 192	1.75 808	9.99 993	60
1	8.24 903	8.24 910	1.75 090	9,99 993	59
$\hat{2}$	8.25 609	8.25 616	1.74 384	9.99 993	58
$\frac{2}{3}$	8.26 304	8.26 312	1.73 688	9.99 993	57
4	8.26 988	8,26 996	$1.73\ 004$	9.99 992	56
5	8.27 661	8.27 669	1.72 331	9.99 992	55
6	8.28 324	8.28 332	1.71 668	9.99 992	54
8	8.28 977 8.29 621	8.28 986 8.29 629	$1.71 \ 014$ $1.70 \ 371$	9.99 992 9.99 992	53 52
9	8.30 255	8.30 263	1.69 737	9.99 991	51
10	8.30 879	8.30 888	1.69 112	9.99 991	50
11	8.31 495	8.31 505	1.68 495	9.99 991	49
12	8,32 103	8.32 112	1.67 888	9.99 990	48
13	8.32 702	8.32 711	1.67 289	9.99 990	47
14	8.33 292	8,33 302	1.66 698	9.99 990	46
15	8.33 875	8.33 886	1.66 114	9.99 990	45
16	8.34 450	8.34 461	1.65 539	9.99 989	44 43
17	8.35 018	8.35 029	1.64 971	9.99 989 9.99 989	43
18 19	8.35 578 8.36 131	8.35 590 8.36 143	$1.64\ 410$ $1.63\ 857$	9.99 989	41
20	8.36 678	8.36 689	1.63 311	9.99 988	40
21	8.37 217	8.37 229	1.62 771	9.99 988	39
$\frac{21}{22}$	8 37 750	8.37 762	1.62 238	9.99 988	38
23	8.38 276	8.38 289	1.61 711	9.99 987	37
24	8.38 796	8.38 809	1.61 191	9.99 987	36
25	8.39 310	8.39 323	1.60 677	9.99 987	35
26	8.39 818	8.39 832	1.60 168	9.99 986	34
27	8.40 320	8.40 334	1.59 666	9.99 986	33
28	8.40 816	8.40 830	1.59 170	9.99 986	32
29	8.41 307	8.41 321	1.58 679	9.99 985	31
30	8.41 792	8.41 807	1,58 193	9.99 985	30
31	8.42 272 8.42 746	8.42 287 8.42 762	1.57 713 1.57 238	9.99 98 5 9.99 984	$\frac{29}{28}$
32 33	8.42 740 8.43 216	8.43 232	1.56 768	9.99 984	27
35 34	8.43 680	8.43 696	1.56 304	9.99 984	26
35	8.44 139	8.44 156	1.55 844	9.99 983	25
36	8.44 594	8.44 611	1.55 389	9.99 983	24
37	8.45044	8.45 061	1.54 939	9.99 983	23
38	$8.45\ 489$	8.45 507	1.54 493	9.99 982	22
39	8.45 930	8.45 948	1.54 052	9.99 982	21
40	8.46 366	8.46 385	1.53 615	9.99 982	20
41	8.46 799	8.46 817	1.53 183	9.99 981	19
42 43	$8.47 \ 226 \ 8.47 \ 650$	8.47 245 8.47 669	1.52755 1.52331	9.99 981 9.99 981	18 17
43	8.48 069	8.48 089	1.52 551	9.99 980	16
45	$8.48\ 48\overline{5}$	8.48 505	1.51 495	9.99 980	15
46	8.48 896	8.48 917	1.51 083	9.99 979	14
47	8.49 304	8.49 325	$1.5067\overline{5}$	9.99 979	13
48	8.49 708	8.49 729	1.50 271	9.99 979	12
49	8.50 108	8.50 130	1.49 870	9.99 978	11
50	8.50 504	8.50 527	1.49 473	9.99 978	10
$\frac{51}{52}$	8.50 897 8.51 287	8.50 920 8.51 310	1.49 080 1.48 690	9.99 977 9.99 977	9 8
53	8.51 673	8.51 696	1.48 304	9.99 977	7
54	8,52 055	8.52 079	1.47 921	9.99 976	6
55	8.52 434	8.52 459	1.47 541	9.99 976	5
56	8.52 810	$8.52 83\overline{5}$	1.47 165	9.99 975	4
57	8.53 183	8.53 208	1.46 792	9.99975	3
58	8.53 552	8.53 578	1.46 422	9.99 974	2
59	8.53 919	8.53 945	1.46 055	9.99 974	1
60	8.54 282	8.54 308	1.45 692	9.99 974	0
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	'

		~			
	L. Sin.	L. Tan.	L. Cot.	L. Cos.	
0	8.54 282	8.54 308	1.45 692	9.99 974	60
1	8.54 642	8.54 669	1.45 331	9.99 973	59
2	8.54.999	8.55 027	1.44 973	9.99 973	58
3	8.55 354	8.55 382	1.44 618	9.99 972	57
5	8.55 705 8.56 054	8.55 734 8.56 083	1,44 266 1,43 917	9.99 972 9.99 971	56 55
6	8,56 400	8.56 429	1.43 571	9.99 971	54
7	8.56 743	8.56 773	1.43 227	9.99 970	53
8	8.57 084	8.57 114	1.42~886	9.99 970	52
9	8.57 421	8.57 452	1.42 548	9.99 969	-51
10	8.57 757	8.57 788	$1.42\ 212$	9.99 969	50
11	8.58 089	8.58 121	1.41 879	9.99 968	49
12	8.58 419	8.58 451	1.41 549	9.99 968	48
13 14	8.58 747 8.59 072	8.58 779 8.59 105	$1.41 \ 221$ $1.40 \ 895$	9.99 967 9.99 967	47 46
15	8.59 395	8.59 428	1.40 572	9.99 967	45
16	8.59 715	8.59 749	1.40 251	9,99 966	44
17	8.60 033	8.60 068	1,39 932	9.99 966	43
18	8.60 349	8.60 384	1.39 616	9.99 965	42
19	8.60 662	8.60 698	1.39 302	9.99 964	41
20	8.60 973	8.61 009	1.38 991	9.99 964	40
21	8.61 282	8.61 319	1.38 681	9,99 963	39
22	8.61 589	8.61 626	1.38 374	9.99 963	38
23 24	8.61 894 8.62 196	8.61 931 8.62 234	1.38 069 1.37 766	9.99 962 9.99 962	37 36
25	8.62 497	8.62 535	1.37 465	9.99 961	35
26	8.62 795	8.62 834	1.37 166	9.99 961	34
27	8.63 091	8.63 131	1.36 869	9,99 960	33
28	8.63 385	8.63 426	1.36 574	9.99 960	32
29	8.63 678	8.63 718	1.36 282	9,99 959	31
30	8.63 968	8.64 009	1.35 991	9.99 959	30
31	8.64 256	8.64 298	1.35 702	9.99 958	29
32	8.64 543	8.64 585	1.35 415	9.99 958	28
33	8.64 827 8.65 110	8.64 870	1.35 130 1.34 846	9,99 957 9,99 956	27 26
34 35	8,65 391	8.65 154 8.65 435	1.34 565	9.99 956	25
36	8,65 670	8.65 715	1.34 285	9.99 955	24
37	8.65 947	8.65 993	1.34 007	9.99 955	23
38	8.66 223	8.66 269	1.33 731	9.99 954	22
39	8.66 497	8.66 543	1.33 457	9.99 954	21
40	8,66 769	8.66 816	1.33 184	9,99 953	20
41	8,67 039	8.67 087	1.32 913	9.99 952	19
42	8.67 308	8.67 356	1.32 644	9.99 952	18
43	8,67 575 8,67 841	8.67 624 8.67 890	1.32 376 1.32 110	9.99 951 9.99 951	17 16
44 45	8.68 104	8.68 154	1.32 110	9.99 950	15
46	8.68 367	8.68 417	1.31 583	9.99 949	14
47	8.68 627	8.68 678	1.31 322	9.99 949	13
48	8,68 886	8,68 938	1.31 062	9.99 948	12
49	8.69 144	8.69 196	1.30 804	9.99 948	11
50	8,69 400	8.69 453	1.30 547	9.99 947	10
51	8.69 654	8.69 708	1.30 292	9.99 946	9
52	8,69,907	8.69 962	1,30 038	9.99 946	8
53 54	8.70 159 8.70 409	8.70 214 8.70 465	1.29 786 1.29 535	9.99 945	7 6
55	8.70 658	8.70 714	1.29 286	9.99 944	5
56	8.70 905	8.70 962	1.29 038	9.99 943	4
57	8.71 151	8.71 208	1.28792	9.99 942	3
58	8.71 395	8.71 453	1.28 547	9,99 942	2
59	8.71 638	8.71 697	1.28 303	9.99 941	1
60	8.71 880	8.71 940	1.28 060	9,99 940	0
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	,
			100		

,	L. Sin.	L. Tan.	L. Cot.	L. Cos.	
0	8.71 880	8.71 940	1.28 060	9.99 940	60
1	8.72 120	8.72 181	1.27 819	9.99 940	59
	$8.72\ 359$	8.72 420	1.27580	9.99 939	58
$\frac{2}{3}$	8.72597	8.72 659	1.27 341	9,99 938	57
4	8.72 834 8.73 069	8.72 896	1.27 104	9.99 938	- 56
5	8.73 069	8.73 132	1.26 868	9.99 937	55
6	8.73 303	8.73 366	1.26 634	9.99 936	54
7	8.73 535	8,73 600	1.26 400 1.26 168	9.99 936	53
8 9	8.73 767 8.73 997	8.73 832 8.74 063	1.25 937	9.99 935 9.99 934	52 51
10	8.74 226	8.74 292	1.25 708	9.99 934	50
11	8.74 454	8.74 521	1.25 479	9.99 933	49
12	8.74 680	8.74 748	1.25 252	9.99 932	48
13	8.74 906	8.74 974	1.25 026	9.99 932	47
14	8.75 130	8.75 199	1.24 801	9,99 931	46
15	8.75 353	8.75 423	1.24 577	9.99 930	45
16	$8.75\ 57\overline{5}$	8.75 645	$1.24 \ 35\overline{5}$	9.99 929	44
17	8.75 795	8.75 867	1.24 133	9.99 929	43
18	8.76 015	8.76 087	1.23 913	9.99 928	42
19	8.76 234	8.76 306	1.23 694	9.99 927	41
20	8.76 451	8.76 525	1.23 475	9.99 926	40
21	8.76 667	8.76 742	1.23 258	9.99 926	39
22 23	8.76 883	8.76 958	1.23 042	9.99 925	38
$\frac{23}{24}$	8.77 097 8.77 310	8.77 173 8.77 387	1.22 827 1.22 613	9.99 924 9.99 923	37 36
$\frac{24}{25}$	8.77 522	8.77 600	1.22 400	9.99 923	35
$\frac{26}{26}$	8.77 733	8.77 811	1.22 189	9.99 922	34
27	8.77 943	8.78 022	1.21 978	9.99 921	33
28	8.78 152	8.78 232	1.21 768	9.99 920	32
29	8.78 360	8.78 441	1.21 559	9.99 920	31
30	8.78 568	8.78 649	1.21 351	9.99 919	30
31	8.78 774	8.78 855	1.21 145	9.99 918	29
32	8.78 979	8.79 061	1.20939	9.99 917	28
- 33	8.79 183	8.79 266	$1.20\ 734$	9.99 917	27
34	8.79 386	8.79 470	$\begin{array}{c} 1.20\ 530 \\ 1.20\ 327 \end{array}$	9.99 916	26
35	8.79 588	8.79 673	1.20 327	9.99 915	25
36	8.79 789	8.79 875	1.20 125	9.99 914	$\frac{24}{23}$
37 38	8.79 990 8.80 189	8.80 076 8.80 277	1.19924 1.19723	9.99 913 9.99 913	$\frac{25}{22}$
39	8.80 388	8.80 476	1.19 524	9.99 912	21
40	8.80 585	8.80 674	1.19 324	9.99 911	20
41	8.80 782	8.80 872	1.19 128	9.99 910	19
42	8.80 978	8.81 068	1.18 932	9.99 909	18
43	8.81 173	8.81 264	1.18 736	9.99 909	17
44	8.81 367	8.81 459	1.18 541	9.99 908	16
$\overline{45}$	8.81 560	8.81 653	1.18 347	9.99 907	15
46	8.81 752	8.81 846	1.18 154	9.99 906	14
47	8.81 944	8.82 038	1.17 962	9.99 905	13
48	8.82 134	8.82 230	1.17 770	9.99 904	12
49	8.82 324	8.82 420	1.17 580	9.99 904	11
50	8,82 513	8.82 610	1.17 390	9.99 903	10
51 52	8.82 701 8.82 888	8.82 799	1.17 201	9.99 902	9
53	8.82888 $8.8307\overline{5}$	8.82987 8.83175	1.17 013 1.16 825	9.99 901 9.99 900	8 7
54	8.83 261	8.83 361	1.16 639	9.99 899	6
55	8.83 446	8.83 547	1.16 453	9.99 898	5
56	8.83 630	8.83 732	1.16 268	9.99 898	4
57	8.83 813	8.83 916	1.16 084	9.99 897	3
58	8.83 996	8.84 100	1.15 900	9.99 896	$\frac{2}{1}$
59	8.84 177	8.84 282	1.15 718	9.99 895	
60	8.84 358	8.84 464	1.15 536	9.99 894	0
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	,

1	L. Sin.	L. Tan.	L. Cot.	L. Cos.	
0	8.84 358	8.84 464	1.15 536	9,99 894	60
1	8.84 539	8.84 646	1.15 354	9.99 893	59
2	8.84 718	8.84 826	1.15 174	9.99 892	58
3	8.84 897	8.85 006	1.14 994	9.99 891	57
4	8.85 075	8.85 185	1.14 815	9.99 891	56
5	8.85 252	8.85 363	1.14 637	9.99 890	55
6 7	8.85 429	8.85 540	1.14 460	9.99 889	54
8	8.85 605 8.85 780	8.85 717 8.85 893	1.14 283 1.14 107	9.99 888 9.99 887	53 52
9	8.85 955	8.86 069	1.13 931	9.99 886	51
10	8.86 128	8.86 243	1.13 757	9,99 885	50
11	8.86 301	8.86 417	1.13 583	9.99 884	49
12	8,86 474	8.86 591	1.13 409	9.99 883	48
13	8.86 645	8.86 763	1.13 237	9.99.882	47
14	8.86 816	8.86 935	1.13 065	9.99 881	46
15	8.86 987	8.87 106	1.12 894	9.99 880	45
16 17	8.87 156 8.87 325	8.87 277 8.87 447	1.12 723 1.12 553	9.99 879 9.99 879	44
18	8.87 494	8.87 616	1.12 384	9.99 878	42
19	8.87 661	8.87 785	1.12 215	9.99 877	41
20	8.87 829	8.87 953	1.12 047	9.99 876	40
21	8.87 995	8.88 120	1.11 880	9,99 875	39
22	8.88 161	8.88 287	1.11 713	9.99 874	38
23	8.88 326	8.88 453	1.11 547	9.99 873	37
24	8.88 490	8.88 618	1.11 382	9.99 872	36
25 26	8.88 654 8.88 817	8.88 783 8.88 948	$1.11\ 217$ $1.11\ 052$	9.99.871 9.99.870	35 34
27	8,88 980	8,89 111	1.11 032	9,99 869	33
28	8.89 142	8.89 274	1.10 726	9.99 868	32
29	8.89 304	8.89 437	1.10 563	9.99 867	31
30	8.89 464	8.89 598	1.10 402	9.99 866	30
31	8.89 625	8.89 760	1.10 240	9.99 865	29
32	8.89 784	8.89 920	1.10 080	9.99 864	28
33	8.89 943	8.90 080	1.09 920	9.99 863	27
34 35	8.90 102 8.90 260	8.90 240 8.90 399	1.09 760 1.09 601	9.99 862 9.99 861	26 25
36	8.90 417	8.90 557	1.09 443	9.99 860	24
37	8.90 574	8.90 715	1.09 285	9.99 859	23
38	8.90 730	8.90 872	1.09 128	9.99 858	22
39	8.90 885	8.91 029	1.08 971	9.99 857	21
40	8.91 040	8.91 185	1.08 815	9.99 856	20
41	8.91 195	8.91 340	1.08 660	9.99 855	19
42	8.91 349	8.91 495	1.08 505	9.99 854	18
43	8.91 502 8.91 655	8.91 650 8.91 803	$1.08\ 350$ $1.08\ 197$	9.99 853 9.99 852	17 16
45	8.91 807	8.91 957	1.08 043	9.99 851	15
46	8.91 959	8.92 110	1.07 890	9.99 850	14
47	8.92 110	8.92 262	1.07 738	9.99 848	13
48	$8.92\ 261$	8.92 414	1.07 586	9.99 847	12
49	8.92 411	8.92 565	1.07 435	9.99 846	11
50	8.92 561	8.92 716	1.07 284	9.99 845	10
51	8.92 710	8.92 866	1.07 134	9.99 844	9
52	8.92 859	8.93 016	1.06 984 1.06 835	9.99 843 9.99 842	8
53 54	8.93 007 8.93 154	8.93 165 8.93 313	1.06 687	9.99 841	$\frac{7}{6}$
55	8.93 301	8,93 462	1.06 538	9.99 840	5
56	8.93 448	8.93 609	1.06 391	9,99 839	4
57	8,93 594	8,93 756	1.06 244	9.99 838	3
58	8.93 740	8.93 903	1.06 097	9.99 837	2
59	8.93 885	8,91 049	1.05 951	9,99 836	
60	8.94 030	8.94 195	1.05 805	9.99 834	0
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	1

,	L. Sin.	L. Tan.	L. Cot.	L. Cos.	
0	8.94 030	8.94 195	1.05 805	9.99 834	60
1	8.94 174	8.94 340	1.05 660	9.99 833	59
2	8.94 317	8.94 485	$1.05\ 51\overline{5}$	9.99 832	58
3	8,94 461	8.94 630	1.05 370	9.99 831	57
4	8.94 603 8.94 746	8.94 773 8.94 917	1.05 227 1.05 083	9.99 830 9.99 829	56 55
. 5	8.94 887	8.95 060	1.03 003	9.99 828	54
7	8.95 029	8.95 202	1.04 798	9.99827	53
8	8.95 170	8.95 344	1.04 656	9.99 825	52
9	8.95 310	8.95 486	1.04 514	9.99 824	51
10	8.95 450	8.95 627	1.04 373	9.99 823	50
$\frac{11}{12}$	8.95 589 8.95 728	8.95 767 8.95 908	1.04 233 1.04 092	9.99 822 9.99 821	49 48
13	8.95 867	8.96 047	1.03 953	9.99 820	47
14	8.96 005	8.96 187	1.03 813	9.99 819	46
15	8.96 143	8.96 325	1.03 675	9.99 817	45
16 17	8.96 280 8.96 417	8,96 464 8,96 602	1.03536 1.03398	9.99 816 9.99 815	44 43
18	8.96 553	8.96 739	1.03 261	9.99 814	42
19	8.96 689	8.96 877	1.03 123	9.99 813	41
20	8.96 825	8.97 013	1.02 987	9.99 812	40
21	8.96 960	8.97 150	1.02 850	9.99 810	39
22	8.97 095	8.97 285	1.02 715	9.99 809	38
$\frac{23}{24}$	8.97 229 8.97 363	8.97 421 8.97 556	1.02579 1.02444	9,99 808 9,99 807	37 36
25	8.97 496	8.97 691	1.02 309	9.99 806	35
26	8.97 629	8.97 825	$1.02\ 175$	9.99 804	34
27	8.97 762 8.97 894	8.97 959	1.02 041	9.99 803	33
28 29	8.98 026	8.98 092 8.98 225	1.01908 1.01775	9.99 802 9.99 801	$\frac{32}{31}$
30	8.98 157	8.98 358	1.01 642	9.99 800	30
31	8.98 288	8.98 490	1.01 510	9.99 798	29
-32	8.98 419	8.98 622	1.01 378	9.99 797	28
33	8.98 549	8.98 753	1.01 247	9.99 796	27
34 35	8.98 679 8.98 808	$8.98884 \\ 8.9901\overline{5}$	$1.01\ 116$ $1.00\ 985$	$9.9979\overline{5}$ 9.99793	$\frac{26}{25}$
36	8.98 937	8.99 145	1.00 855	9.99 792	$\frac{26}{24}$
37	8.99 066	$8.99\ 275$	$1.0072\overline{5}$	9.99 791	23
38 39	8.99 194 8.99 322	$8.9940\overline{5}$ 8.99534	1.00 595 1.00 466	9.99 790 9.99 788	$\frac{22}{21}$
40	8.99 450	8.99 662	1.00 338	9.99 787	20
41	8.99 577	8.99 791	1.00 209	9.99 786	19
42	8.99 704	8.99 919	1.00 081	9.99 785	18
43	8.99 830	9.00 046	0.99954	9.99 783	17
44	8.99 956	9.00 174 9.00 301	0.99 826	9.99 782	16
45 46	$9.00 \ 082$ $9.00 \ 207$	$9.00\ 301$ $9.00\ 427$	$0.99699 \\ 0.99573$	9.99 781 9.99 780	15 14
47	9.00 332	9.00 553	0.99 447	9.99 778	13
48	9.00456	9.00 679	0.99 321	9.99 777	12
49	9.00 581	9.00 805	0.99 195	9.99 776	11
50	9.00 704	9.00 930	0.99 070	9.99 775	10
51 52	9.00828 9.00951	$9.01\ 05\overline{5}$ $9.01\ 179$	$0.98945 \\ 0.98821$	9.99 773 9.99 772	9 8
53	9.00 931	9.01 303	0.98 697	9.99712 9.99771	7
54	9.01 196	9.01 427	$0.98\ 573$	9.99769	6
55 50	9.01 318	9.01 550	0.98450	9.99 768	5
56 57	9.01 440 9.01 561	9.01 673 9.01 796	$0.98\ 327$ $0.98\ 204$	9.99 767 9.99 765	4 3
58	$9.01\ 682$	9.01 918	0.98 082	9.99764	2
59	9.01 803	9.02 040	0.97 960	9.99 763	1
60	9.01 923	9.02 162	0.97 838	9.99 761	0
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	′

0							
,	L. Sin.	L. Tan.	L. Cot.	L. Cos.			
0	9.01 923	9.02 162	0.97 838	9,99 761	60		
1	9.02 043	9.02 283	0.97 717	9.99 760	59		
2	9.02 163	9.02 404	0.97 596	9.99 759	58		
3 4	9.02 283 9.02 402	9.02 525 9.02 645	$0.97\ 475$ $0.97\ 355$	9.99 757 9.99 756	57		
5	9.02 402	9.02 766	0.97 234	9.99 755	56 55		
6	9.02 639	9.02 885	0.97 115	9.99 753	54		
7	9.02 757	9.03 005	0.96 995	9.99 752	53		
8	9.02 874	9.03 124	0.96 876	9.99 751	52		
9	9.02 992	9.03 242	0.96 758	9.99 749	-51		
10	9.03 109	9.03 361	0.96 639	9.99 748	50		
11	9.03 226	9.03 479	0.96 521	9.99 747	49		
12 13	9.03 342 9.03 458	9.03 597 9.03 714	0.96 403 0.96 286	9.99 745 9.99 744	48 47		
14	9.03 574	9.03 832	0.96 168	9.99 742	46		
15	9.03 690	9.03 948	0.96 052	9.99 741	45		
16	$9.03~80\overline{5}$	9.04 065	0.95 935	9.99 740	44		
17	9.03 920	9.04 181	0.95 819	9.99 738	43		
18	9.04.034	9.04 297	0.95 703	9.99 737	42		
19	9.04 149	9.04 413	0.95 587	9.99 736	41		
20	9.04 262	9.04 528	0.95 472	9.99 734	40		
21 22	9.04 376 9.04 490	9.04 643 9.04 758	0.95 357 0.95 242	9.99 733 9.99 731	39 38		
23	9.04 603	9.04 873	0.95 127	9.99 730	37		
24	9.04 715	9.04 987	0.95 013	9.99 728	36		
25	9.04 828	9.05 101	0.94 899	9.99 727	35		
26	9.04 940	9.05 214	0.94 786	9.99 726	34		
$\frac{27}{28}$	9.05 052 9.05 164	9.05 328 9.05 441	$0.94\ 672$ $0.94\ 559$	9.99 724 9.99 723	33 32		
20	9.05 275	9.05 553	0.94 447	9.99 721	31		
30	9.05 386	9.05 666	0.94 334	9.99 720	30		
31	9.05 497	9.05 778	0.94 222	9.99 718	29		
32	9.05 607	9.05 890	0.94 110	9.99 717	28		
33	9.05717	9.06 002	0.93 998	9.99 716	27		
34	9.05 827	9.06 113	0.93~887	9.99 714	26		
35	9.05 937	9.06 224	0.93 776	9.99 713 9.99 711	$\frac{25}{24}$		
36 37	9.06 046 9.06 155	9.06 335 9.06 445	0.93 665 0.93 555	9.99 710	23		
38	9.06 264	9.06 556	0.93 444	9.99 708	22		
39	$9.06\ 372$	9.06 666	0.93 334	9.99 707	21		
40	9.06 481	9.06 775	0.93 225	9.99 705	20		
41	9.06 589	9.06 885	0.93 115	9.99 704	19		
42	9.06 696	9.06 994	0.93 006	9.99 702	18		
43	9.06 804	9.07 103	0.92 897	9.99 701	17		
44 45	9.06 911 9.07 018	9.07 211 9.07 320	0.92 789 0.92 680	9,99 699 9,99 698	16 15		
46	9.07 124	9.07 428	0.92 572	9.99 696	14		
47	$9.07\ 231$	9.07 536	0.92 464	9,99 695	13		
48	9.07 337	9.07 643	$0.92\ 357$	9,99 693	12		
49	9.07 442	9.07 751	0.92 249	9,99,692	11		
50	9.07 548	9.07 858	0.92 142	9,99 690	10		
51	9.07 653	9.07 964	0.92 036	9.99 689	9		
52 53	9.07 758 9.07 863	9.08 071 9.08 177	0.91 929 0.91 823	9.99 687 9.99 686	8 7		
54	9.07 968	9.08 283	0.91 717	9.99 GS4	6		
55	9.08 072	9.08 389	0.91 611	9.99 683	5		
56	$-9.08\ 176$	9.08 495	0.91 505	9.99 681	4		
57	9.08 280	9.08 600	0.91 400	9.99 680	3		
58 59	9.08 383 9.08 486	9.08 705 9.08 810	0.91 295 0.91 190	9.99 678 9.99 677	2		
60	9.08 589	9.08 914	0.91 086	9.99 675	0		
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	,		
	2. 000.	2. 0011					

,	L. Sin.	L. Tan.	L. Cot.	L. Cos.	
0	9.08 589	9.08 914	0.91 086	9.99 675	60
1	9.08 692	9.09 019	0.90 981	9.99 674	59
2	$9.08\ 795$	9.09 123	0.90 877	9.99 672	58
$\bar{3}$	9.08 897	9.09 227	0.90 773	9.99 670	57
4	9,08 999	9,09 330	$0.90\ 670$	9.99 669	-56
5	9.09 101	9.09 434	0.90 566	9,99 667	55
6	9.09 202	9.09 537	0.90 463	9.99 666	54
7	9.09 301	9.09 640	0.90 360	9.99 664	53
8 9	9.09 405 9.09 506	9.09 742 9.09 845	$0.90 \ 258$ $0.90 \ 155$	9.99 663 9.99 661	$\frac{52}{51}$
10	9.09.606	9.09 917	0.90 053	9.99 659	50
11	9.09 707	9.10 049	0.89 951	9,99 658	49
$\hat{1}\hat{2}$	9.09 807	9.10 150	0.89 850	9.99 656	48
13	9.09 907	9.10 252	0.89 748	9.99 655	47
14	9.10 006	9.10 353	0.89647	9,99 653	46
15	9.10 106	9,10 454	0.89546	9.99651	45
16	$9.10\ 20\overline{5}$	$9.10\ 55\overline{5}$	0.89445	9.99650	44
17	9.10 304	9.10 656	$0.98\ 344$	9.99 648	43
18	9.10 402	9.10 756	$0.89\ 244$	9.99 647	42
19	9.10 501	9.10 856	0.89 144	9.99 645	41
20	9.10 599	9.10 956	0.89 044	9.99 643	40
21	9.10 697	$9.11\ 056$	0.88944	9.99 642	39
22	9.10 795	9.11 155	0.88 845	9.99 640	38
23	9.10 893	9.11 254	0.88 746	9,99 638	37
24 25	9.10 990 9.11 087	9.11 353 9.11 452	$0.88\ 647$ $0.88\ 548$	9,99 637 9,99 635	36 35
26 26	9.11 184	9.11 551	0.88 449	9.99 633	34
$\frac{50}{27}$	9.11 281	9.11 649	0.88 351	9.99 632	33
28	9.11 377	9.11 747	0.88 253	9.99 630	32
29	9.11 474	9.11 845	$0.88\ 15\overline{5}$	9.99 629	31
30	9.11 570	9.11 943	0.88 057	9.99 627	30
31	9.11 666	9.12 040	0.87 960	9.99 625	29
32	9.11761	. 9.12 138	$0.87 \ 862$	9.99 624	28
33	$9.11\ 857$	$9.12\ 235$	0.87 765	9.99 622	27
34	$9.11\ 952$	$9.12\ 332$	0.87 668	9.99 620	26
35	9.12 047	9,12 428	0.87 572	9.99 618	25
36	9.12 142	9.12 525	0.87 475	9.99 617	24
37 38	9.12 236 9.12 331	9.12 621 9.12 717	$0.87\ 379 \ 0.87\ 283$	9.99 615 9.99 613	23 22
39	$9.12 \ 42\overline{5}$	9.12 813	0.87 187	9.99 612	$\frac{22}{21}$
40	9.12 519	9.12 909	0.87 091	9.99 610	20
41	9.12 612	9.13 004	0.86 996	9.99 608	19
$\frac{1}{42}$	9.12706	9.13 099	0.86 901	9.99 607	18
43	9.12799	9.13 194	0.86 806	$9.99\ 60\overline{5}$	17
44	9.12892	$9.13\ 289$	0.86 711	9.99 603	16
45	9.12985	9.13 384	0.86 616	9.99 601	15
46	9.13 078	9.13 478	0.86 522	9.99 600	14
47	9.13 171	9.13 573	0.86 427	9.99 598	13
48 49	9.13 263 9.13 355	9.13 667 9.13 761	$0.86 \ 333 \ 0.86 \ 239$	9.99 59 <u>6</u> 9.99 59 5	12 11
50	9.13 447	9.13 854	$\frac{-0.86 \ 259}{0.86 \ 146}$	9.99 593	10
51	9.13 539	$\frac{9.13 \ 654}{9.13 \ 948}$	0.86 052	9.99 591	9
52	9.13 630	9.14 041	0.85 959	9.99 589	8
53	9.13 722	9.14 134	0.85 866	9.99 588	$\ddot{7}$
54	9.13 813	9.14 227	0.85 773	9.99 586	6
55	9.13 904	9.14 320	$0.85\ 680$	9.99 584	5
56	9.13994	9.14 412	$0.85\ 588$	9.99 582	4
57	9.14 085	9.14 504	0.85 496	9.99 581	3
58	9.14 175	9.14 597	0.85 403	9.99 579	2
59 60	9.14 266	9.14 688	0.85 312	9.99 577	1 0
υU	9.14 356	9.14 780	0.85 220	9.99 575	U
1	L. Cos.	L. Cot.	L. Tan.	L. Sin.	/

v L. Sin. L. Tan. L. Cot. L. Cos. 0 9.14 356 9.14 780 0.85 220 9.99 574 1 9.14 445 9.14 863 0.85 037 9.99 572 3 9.14 535 9.14 963 0.85 037 9.99 572 4 9.14 714 9.15 1054 0.84 855 9.99 566 5 9.14 880 9.15 236 0.84 764 9.99 566 6 9.14 8801 9.15 237 0.84 673 9.99 566 7 9.14 9801 9.15 507 0.84 673 9.99 566 8 9.15 069 9.15 417 0.84 833 9.99 566 9.15 187 9.15 508 0.84 402 9.99 569 8 9.15 069 9.15 688 0.84 312 9.99 550 10 9.15 245 9.15 867 0.84 133 9.99 557 11 9.15 333 9.15 777 0.84 223 9.99 550 12 9.15 421 9.15 867 0.84 133 9.99 552 14 9.15 508 9.15 9	-					
1 9.14 445 9.14 963 0.85 037 9.99 574 2 9.14 535 9.14 963 0.85 037 9.99 570 3 9.14 624 9.15 054 0.84 946 9.99 576 4 9.14 714 9.15 145 0.84 835 9.99 568 5 9.14 803 9.15 236 0.84 673 9.99 566 6 9.14 891 9.15 327 0.84 673 9.99 566 7 9.14 980 9.15 147 0.84 533 9.99 563 8 9.15 039 9.15 508 0.84 402 9.99 561 9 9.15 157 9.15 588 0.84 402 9.99 559 10 9.15 245 9.15 688 0.84 312 9.99 556 11 9.15 333 9.15 777 0.84 223 9.99 556 12 9.15 425 9.15 867 0.84 044 9.99 550 13 9.15 506 9.44 044 9.99 550 14 9.15 506 9.16 046 0.83 954 9.99 550 15 9.15 683 9.16 91 <th></th> <th>L. Sin.</th> <th>L. Tan.</th> <th>L. Cot.</th> <th>L. Cos.</th> <th></th>		L. Sin.	L. Tan.	L. Cot.	L. Cos.	
2 9.14 535 9.14 963 0.85 637 9.99 570 3 9.14 624 9.15 054 0.84 946 9.99 570 4 9.14 714 9.15 145 0.84 855 9.99 566 5 9.14 803 9.15 236 0.84 764 9.99 566 6 9.14 891 9.15 327 0.84 673 9.99 563 7 9.14 980 9.15 508 0.84 492 9.99 563 8 9.15 069 9.15 508 0.84 492 9.99 561 9 9.15 157 9.15 508 0.84 402 9.99 559 10 9.15 245 9.15 688 0.84 312 9.99 557 11 9.15 333 9.15 777 0.84 223 9.99 556 12 9.15 421 9.15 867 0.84 133 9.99 556 13 9.15 508 9.15 566 0.84 044 9.99 552 14 9.15 596 9.16 046 0.83 384 9.99 556 15 9.15 683 9.16 135 0.83 865 9.99 548 16 9.15 770 9.16 224 0.83 776 9.99 548 16 9.15 770 9.16 224 0.83 776 9.99 546 17 9.15 857 9.16 312 0.83 688 9.99 545 18 9.15 944 9.16 401 0.83 599 9.99 541 19 9.16 030 9.16 489 0.83 511 9.99 530 20 9.16 116 9.16 577 0.83 423 9.99 539 21 9.16 203 9.16 665 0.83 325 9.99 533 22 9.16 374 9.16 841 0.83 159 9.99 533 24 9.16 460 9.16 928 0.83 072 9.99 533 24 9.16 460 9.16 928 0.83 072 9.99 533 25 9.16 631 9.17 103 0.82 897 9.99 528 27 9.16 716 9.17 100 0.82 810 9.99 528 27 9.16 806 9.17 363 0.82 637 9.99 528 27 9.16 801 9.17 708 0.82 520 9.99 518 32 9.17 139 9.17 622 0.82 733 9.99 539 31 9.17 055 9.17 536 0.82 404 9.99 520 31 9.17 055 9.17 756 0.82 509 9.99 513 32 9.17 139 9.17 90 0.82 810 9.99 528 30 9.16 870 9.17 450 0.82 550 9.99 528 31 9.17 055 9.17 536 0.82 404 9.99 518 32 9.17 139 9.17 622 0.82 378 9.99 518 33 9.17 223 9.17 788 0.82 292 9.99 518 34 9.17 641 9.18 136 0.81 844 9.99 505 34 9.17 807 9.17 794 0.82 292 9.99 511 35 9.17 391 9.17 880 0.82 120 9.99 511 36 9.17 474 9.18 136 0.81 694 9.99 504 40 9.17 807 9.18 306 0.81 694 9.99 504 41 9.18 137 9.18 644 0.81 336 9.99 488 48 9.18 465 9.18 919 0.81 604 9.99 485 49 9.18 689 9.18 759 0.81 604 9.99 485 49 9.18 689 9.18 759 0.81 604 9.99 485 49 9.18 689 9.18 759 0.81 604 9.99 485 49 9.18 805 9.18 190 0.81 104 9.99 485 50 9.18 839 9.19 146 0.80 837 9.99 470 51 9.18 133 9.19 643 0.80 837 9.99 470 51 9.19 133 9.19 643 0.80 837 9.99 470 51 9.19 133 9.19 675 0.80 8111 9.99 464	0	9.14 356	9.14 780	0.85 220	9.99 575	60
4 9.14 714 9.15 1345 0.84 855 9.99 566 5 9.14 891 9.15 236 0.84 673 9.99 566 6 9.14 891 9.15 227 0.84 673 9.99 566 7 9.14 980 9.15 508 0.84 402 9.99 561 8 9.15 059 9.15 508 0.84 402 9.99 559 9 9.15 157 9.15 598 0.84 402 9.99 559 10 9.15 245 9.15 688 0.84 312 9.99 557 11 9.15 333 9.15 777 0.84 223 9.99 556 12 9.15 421 9.15 867 0.84 044 9.99 552 14 9.15 596 9.16 046 0.83 944 9.99 552 14 9.15 596 9.16 046 0.83 944 9.99 5552 14 9.15 596 9.16 046 0.83 944 9.99 5552 14 9.15 597 9.16 312 0.83 885 9.99 548 16 9.15 770 9.16 224 0.83 776 9.99 545 18 9.16	1					59
4 9.14 714 9.15 1345 0.84 855 9.99 566 5 9.14 891 9.15 236 0.84 673 9.99 566 6 9.14 891 9.15 227 0.84 673 9.99 566 7 9.14 980 9.15 508 0.84 402 9.99 561 8 9.15 059 9.15 508 0.84 402 9.99 559 9 9.15 157 9.15 598 0.84 402 9.99 559 10 9.15 245 9.15 688 0.84 312 9.99 557 11 9.15 333 9.15 777 0.84 223 9.99 556 12 9.15 421 9.15 867 0.84 044 9.99 552 14 9.15 596 9.16 046 0.83 944 9.99 552 14 9.15 596 9.16 046 0.83 944 9.99 5552 14 9.15 596 9.16 046 0.83 944 9.99 5552 14 9.15 597 9.16 312 0.83 885 9.99 548 16 9.15 770 9.16 224 0.83 776 9.99 545 18 9.16	2					58
5 9.14 803 9.15 236 0.84 764 9.99 566 6 9.14 891 9.15 327 0.84 673 9.99 563 7 9.14 980 9.15 508 0.84 492 9.99 561 8 9.15 069 9.15 508 0.84 492 9.99 561 9 9.15 157 9.15 508 0.84 402 9.99 557 10 9.15 245 9.15 508 0.84 312 9.99 556 12 9.15 333 9.15 777 0.84 223 9.99 556 12 9.15 508 9.15 956 0.84 044 9.99 552 14 9.15 508 9.15 956 0.84 044 9.99 552 15 9.15 683 9.16 135 0.83 865 9.99 548 16 9.15 770 9.16 224 0.83 776 9.99 546 17 9.15 857 9.16 312 0.83 688 9.99 545 18 9.15 944 9.16 489 0.83 559 9.99 543 19 9.16 303 9.16 665 0.83 423 9.99 539 21 9.16 2		9.14 624				57 56
6 9.14 891 9.15 327 0.84 673 9.99 565 7 9.14 980 9.15 417 0.84 583 9.99 561 8 9.15 069 9.15 508 0.84 402 9.99 561 9 9.15 157 9.15 508 0.84 402 9.99 559 10 9.15 245 9.15 688 0.84 312 9.99 557 11 9.15 333 9.15 777 0.84 233 9.99 556 12 9.15 421 9.15 867 0.84 044 9.99 552 14 9.15 506 9.16 046 0.83 494 9.99 552 14 9.15 596 9.16 046 0.83 494 9.99 552 14 9.15 596 9.16 046 0.83 494 9.99 546 15 9.15 883 9.16 135 0.83 685 9.99 548 16 9.15 770 9.16 224 0.83 776 9.99 546 17 9.15 883 9.16 5132 0.83 688 9.99 543 18 9.15 941 9.16 401 0.83 559 9.99 543 20 9.16						55
7 9.14 980 9.15 417 9.84 583 9.99 561 9 9.15 157 9.15 598 0.84 492 9.99 561 10 9.15 245 9.15 688 0.84 402 9.99 559 11 9.15 333 9.15 777 0.84 223 9.99 556 12 9.15 421 9.15 867 0.84 033 9.99 554 13 9.15 506 9.16 046 0.83 954 9.99 552 14 9.15 563 9.16 135 0.83 865 9.99 548 16 9.15 770 9.16 224 0.83 776 9.99 548 16 9.15 770 9.16 312 0.83 688 9.99 545 17 9.15 887 9.16 312 0.83 688 9.99 545 18 9.15 944 9.16 401 0.83 599 9.99 543 19 9.16 030 9.16 685 0.83 511 9.99 539 21 9.16 203 9.16 665 0.83 335 9.99 532 21 9.16 289 9.16 753 0.83 247 9.99 532 22 9.1						54
9 9.15 157 9.15 598 0.84 402 9.99 559 10 9.15 245 9.15 688 0.84 312 9.99 557 11 9.15 333 9.15 777 0.84 223 9.99 556 12 9.15 421 9.15 867 0.84 133 9.99 554 13 9.15 508 9.15 956 0.84 044 9.99 552 14 9.15 583 9.16 135 0.83 865 9.99 548 16 9.15 683 9.16 135 0.83 865 9.99 545 18 9.15 984 9.16 613 0.83 868 9.99 545 18 9.15 984 9.16 401 0.83 590 9.99 543 19 9.16 030 9.16 489 0.83 511 9.99 534 20 9.16 116 9.16 577 0.83 423 9.99 539 21 9.16 203 9.16 665 0.83 335 9.99 537 22 9.16 234 9.16 841 0.83 159 9.99 532 23 9.16 374 9.16 841 0.83 159 9.99 535 24 9.	7					53
10 9.15 245 9.15 688 0.84 312 9.99 557 11 9.15 333 9.15 777 0.84 223 9.99 556 12 9.15 421 9.15 867 0.84 034 9.99 556 13 9.15 596 9.16 046 0.83 954 9.99 550 14 9.15 596 9.16 046 0.83 954 9.99 540 15 9.15 683 9.16 135 0.83 685 9.99 546 16 9.15 770 9.16 224 0.83 776 9.99 545 17 9.15 857 9.16 312 0.83 688 9.99 545 18 9.15 944 9.16 489 0.83 591 9.99 545 18 9.15 944 9.16 489 0.83 591 9.99 539 21 9.16 203 9.16 665 0.83 335 9.99 539 21 9.16 203 9.16 665 0.83 247 9.99 535 22 9.16 289 9.16 753 0.83 247 9.99 532 23 9.16 344 9.16 841 0.83 159 9.99 532 25 9						52
11 9.15 333 9.15 777 0.84 223 9.99 556 12 9.15 421 9.15 867 0.84 133 9.99 556 13 9.15 508 9.15 956 0.84 044 9.99 552 14 9.15 506 9.16 046 0.83 954 9.99 550 15 9.15 683 9.16 135 0.83 685 9.99 546 16 9.15 770 9.16 224 0.83 776 9.99 546 17 9.15 857 9.16 312 0.83 688 9.99 545 18 9.15 944 9.16 401 0.83 590 9.99 543 19 9.16 030 9.16 489 0.83 511 9.99 531 20 9.16 116 9.16 577 0.83 423 9.99 532 21 9.16 203 9.16 665 0.83 335 9.99 537 22 9.16 289 9.16 753 0.83 247 9.99 532 23 9.16 344 9.16 841 0.83 159 9.99 533 24 9.16 466 9.16 716 0.82 984 9.99 532 25 9						51
12 9.15 421 9.15 867 0.84 133 9.99 554 13 9.15 508 9.15 966 0.84 044 9.99 552 14 9.15 508 9.16 046 0.83 954 9.99 550 15 9.15 683 9.16 135 0.83 865 9.99 548 16 9.15 770 9.16 224 0.83 776 9.99 545 17 9.15 857 9.16 312 0.83 688 9.99 545 18 9.15 944 9.16 401 0.83 599 9.99 543 19 9.16 030 9.16 489 0.83 511 9.99 539 20 9.16 116 9.16 577 0.83 423 9.99 539 21 9.16 289 9.16 665 0.83 335 9.99 537 22 9.16 289 9.16 753 0.83 247 9.99 532 23 9.16 374 9.16 841 0.83 159 9.99 533 24 9.16 460 9.16 928 0.83 772 9.99 532 25 9.16 545 9.17 106 0.82 984 9.99 530 26 9	1					50
13 9.15 508 9.15 956 0.84 044 9.99 552 14 9.15 596 9.16 046 0.83 954 9.99 550 15 9.15 683 9.16 135 0.83 865 9.99 548 16 9.15 770 9.16 224 0.83 776 9.99 545 18 9.15 944 9.16 401 0.83 590 9.99 543 19 9.16 030 9.16 489 0.83 511 9.99 541 20 9.16 116 9.16 577 0.83 233 9.99 539 21 9.16 203 9.16 665 0.83 335 9.99 532 22 9.16 299 9.16 753 0.83 247 9.99 532 23 9.16 374 9.16 841 0.83 159 9.99 532 24 9.16 460 9.16 928 0.83 072 9.99 532 25 9.16 515 9.17 016 0.82 984 9.99 532 27 9.16 716 9.17 103 0.82 897 9.99 526 28 9.16 801 9.17 277 0.82 723 9.99 526 28 9						49
14 9.15 506 9.16 046 0.83 954 9.99 550 15 9.15 683 9.16 135 0.83 865 9.99 548 16 9.15 770 9.16 224 0.83 776 9.99 545 17 9.15 857 9.16 312 0.83 688 9.99 545 18 9.15 944 9.16 481 0.83 509 9.99 543 19 9.16 106 9.16 489 0.83 511 9.99 539 20 9.16 116 9.16 577 0.83 423 9.99 539 21 9.16 203 9.16 665 0.83 335 9.99 532 23 9.16 289 9.16 753 0.83 247 9.99 532 23 9.16 460 9.16 928 0.83 072 9.99 532 24 9.16 460 9.16 928 0.83 072 9.99 532 25 9.16 631 9.17 106 0.82 894 9.99 532 26 9.16 661 9.17 100 0.82 810 9.99 522 28 9.16 860 9.17 363 0.82 637 9.99 522 30 9						48
15 9.15 683 9.16 135 0.83 865 9.99 546 16 9.15 770 9.16 224 0.83 776 9.99 546 17 9.15 857 9.16 312 0.83 688 9.99 545 18 9.15 944 9.16 401 0.83 590 9.99 543 19 9.16 030 9.16 489 0.83 511 9.99 539 20 9.16 1289 9.16 577 0.83 423 9.99 539 21 9.16 289 9.16 753 0.83 247 9.99 535 22 9.16 289 9.16 753 0.83 247 9.99 535 23 9.16 374 9.16 841 0.83 159 9.99 532 24 9.16 460 9.16 928 0.83 072 9.99 532 24 9.16 466 9.17 106 0.82 984 9.99 532 25 9.16 545 9.17 106 0.82 987 9.99 526 28 9.16 716 9.17 100 0.82 810 9.99 526 28 9.16 861 9.17 456 0.82 637 9.99 520 31						47 46
16 9.15 770 9.16 224 0.83 776 9.99 546 17 9.15 857 9.16 312 0.83 688 9.99 545 18 9.15 944 9.16 401 0.83 590 9.99 543 19 9.16 030 9.16 489 0.83 511 9.99 541 20 9.16 116 9.16 677 0.83 233 9.99 539 21 9.16 203 9.16 665 0.83 335 9.99 532 22 9.16 299 9.16 753 0.83 247 9.99 532 23 9.16 374 9.16 841 0.83 159 9.99 532 24 9.16 460 9.16 928 0.83 072 9.99 532 25 9.16 631 9.17 103 0.82 987 9.99 526 27 9.16 716 9.17 100 0.82 987 9.99 526 28 9.16 861 9.17 277 0.82 723 9.99 522 30 9.16 970 9.17 450 0.82 550 9.99 518 31 9.17 955 9.17 536 0.82 464 9.99 518 32 9						45
18 9.15 944 9.16 401 0.83 599 9.99 541 20 9.16 116 9.16 577 0.83 511 9.99 541 20 9.16 116 9.16 577 0.83 423 9.99 539 21 9.16 289 9.16 665 0.83 335 9.99 537 22 9.16 289 9.16 753 0.83 247 9.99 535 23 9.16 374 9.16 841 0.83 159 9.99 532 24 9.16 460 9.16 928 0.83 072 9.99 532 25 9.16 545 9.17 016 0.82 984 9.99 530 26 9.16 631 9.17 109 0.82 810 9.99 526 27 9.16 710 9.82 710 9.99 522 28 9.16 861 9.17 277 0.82 723 9.99 522 30 9.16 970 9.17 450 0.82 637 9.99 520 31 9.17 755 9.17 536 0.82 637 9.99 518 32 9.17 139 9.17 622 0.82 378 9.99 517 33 9.17 623 9						44
19 9.16 030 9.16 489 0.83 511 9.99 541 20 9.16 116 9.16 577 0.83 423 9.99 539 21 9.16 203 9.16 665 0.83 338 9.99 539 22 9.16 298 9.16 753 0.83 247 9.99 535 23 9.16 374 9.16 841 0.83 159 9.99 532 24 9.16 460 9.16 915 9.17 106 0.82 984 9.99 532 25 9.16 631 9.17 103 0.82 897 9.99 528 26 9.16 631 9.17 103 0.82 810 9.99 526 27 9.16 716 9.17 190 0.82 810 9.99 526 28 9.16 801 9.17 190 0.82 810 9.99 524 29 9.16 886 9.17 363 0.82 637 9.99 522 30 9.16 970 9.17 450 0.82 550 9.99 520 31 9.17 655 9.17 536 0.82 464 9.99 518 32 9.17 307 9.17 536 0.82 292 9.99 515						43
20 9.16 116 9.16 577 0.83 423 9.99 539 21 9.16 203 9.16 665 0.83 335 9.99 537 22 9.16 289 9.16 753 0.83 247 9.99 535 23 9.16 374 9.16 841 0.83 159 9.99 532 24 9.16 460 9.16 928 0.83 072 9.99 532 25 9.16 645 9.17 016 0.82 894 9.99 526 26 9.16 631 9.17 190 0.82 810 9.99 526 27 9.16 716 9.17 190 0.82 810 9.99 526 28 9.16 801 9.17 277 0.82 723 9.99 526 28 9.16 860 9.17 363 0.82 637 9.99 522 30 9.16 970 9.17 450 0.82 550 9.99 522 30 9.16 970 9.17 536 0.82 464 9.99 518 32 9.17 139 9.17 622 0.82 378 9.99 515 33 9.17 233 9.17 622 0.82 378 9.99 515 34 9						42
21 9.16 203 9.16 665 0.83 335 9.99 537 22 9.16 289 9.16 753 0.83 247 9.99 535 23 9.16 374 9.16 841 0.83 159 9.99 532 24 9.16 460 9.16 928 0.83 072 9.99 532 25 9.16 545 9.17 106 0.82 984 9.99 532 26 9.16 631 9.17 100 0.82 810 9.99 528 27 9.16 716 9.17 190 0.82 810 9.99 526 28 9.16 861 9.17 277 0.82 723 9.99 524 29 9.16 886 9.17 363 0.82 637 9.99 522 30 9.16 970 9.17 450 0.82 637 9.99 512 31 9.17 055 9.17 536 0.82 464 9.99 518 32 9.17 139 9.17 622 0.82 378 9.99 517 33 9.17 233 9.17 734 0.82 206 9.99 515 34 9.17 391 9.17 880 0.82 120 9.99 515 34 9						41
22 9.16 289 9.16 753 0.83 247 9.99 535 23 9.16 374 9.16 841 0.83 159 9.99 533 24 9.16 460 9.16 928 0.83 072 9.99 532 25 9.16 545 9.17 016 0.82 984 9.99 532 26 9.16 631 9.17 100 0.82 810 9.99 528 27 9.16 716 9.17 100 0.82 810 9.99 526 28 9.16 801 9.17 277 0.82 723 9.99 524 29 9.16 886 9.17 363 0.82 637 9.99 522 30 9.16 970 9.17 450 0.82 550 9.99 520 31 9.17 055 9.17 536 0.82 464 9.99 518 32 9.17 139 9.17 622 0.82 378 9.99 517 33 9.17 233 9.17 784 0.82 206 9.99 515 34 9.17 391 9.17 880 0.82 120 9.99 515 35 9.17 344 9.17 965 0.82 035 9.99 507 36 9						40
23 9.16 374 9.16 841 0.83 159 9.99 532 24 9.16 460 9.16 928 0.83 072 9.99 532 25 9.16 545 9.17 016 0.82 984 9.99 532 26 9.16 631 9.17 103 0.82 897 9.99 526 27 9.16 716 9.17 190 0.82 810 9.99 526 28 9.16 801 9.17 277 0.82 723 9.99 524 29 9.16 886 9.17 363 0.82 637 9.99 522 30 9.17 955 9.17 536 0.82 464 9.99 518 32 9.17 195 9.17 536 0.82 464 9.99 517 33 9.17 223 9.17 708 0.82 202 9.99 515 34 9.17 307 9.17 704 0.82 202 9.99 515 34 9.17 307 9.17 708 0.82 202 9.99 515 34 9.17 307 9.17 704 0.82 202 9.99 513 35 9.17 318 9.18 50 0.82 120 9.99 513 36 9.						39
24 9.16 460 9.16 928 0.83 072 9.99 532 25 9.16 631 9.17 016 0.82 984 9.99 532 26 9.16 631 9.17 103 0.82 897 9.99 526 27 9.16 716 9.17 190 0.82 810 9.99 526 28 9.16 801 9.17 277 0.82 723 9.99 526 29 9.16 886 9.17 363 0.82 637 9.99 522 30 9.16 970 9.17 450 0.82 550 9.99 520 31 9.17 7055 9.17 536 0.82 464 9.99 518 32 9.17 139 9.17 622 0.82 378 9.99 515 34 9.17 233 9.17 789 0.82 202 9.99 515 34 9.17 391 9.17 880 0.82 120 9.99 515 35 9.17 391 9.17 880 0.82 120 9.99 501 36 9.17 474 9.18 965 0.82 035 9.99 509 37 9.17 538 9.18 051 0.81 949 9.99 507 38						38
25 9.16 545 9.17 016 0.82 984 9.99 530 26 9.16 631 9.17 109 0.82 807 9.99 528 27 9.16 716 9.17 190 0.82 810 9.99 526 28 9.16 801 9.17 277 0.82 723 9.99 524 29 9.16 886 9.17 363 0.82 637 9.99 522 30 9.16 970 9.17 450 0.82 550 9.99 520 31 9.17 055 9.17 536 0.82 464 9.99 518 32 9.17 139 9.17 622 0.82 378 9.99 517 33 9.17 233 9.17 784 0.82 202 9.99 515 34 9.17 391 9.17 880 0.82 120 9.99 513 35 9.17 391 9.17 880 0.82 120 9.99 511 36 9.17 474 9.17 965 0.82 035 9.99 507 38 9.17 641 9.18 136 0.81 864 9.99 505 39 9.17 724 9.18 221 0.81 779 9.99 505 40 9						37
26 9.16 631 9.17 103 0.82 897 9.99 528 27 9.16 716 9.17 109 0.82 810 9.99 526 28 9.16 801 9.17 277 0.82 723 9.99 524 29 9.16 886 9.17 363 6.82 637 9.99 522 30 9.16 970 9.17 450 0.82 637 9.99 520 31 9.17 055 9.17 536 0.82 464 9.99 518 32 9.17 139 9.17 622 0.82 378 9.99 518 33 9.17 233 9.17 708 0.82 202 9.99 515 34 9.17 391 9.17 880 0.82 202 9.99 513 35 9.17 391 9.17 880 0.82 120 9.99 513 36 9.17 474 9.17 965 0.82 035 9.99 507 38 9.17 641 9.18 136 0.81 864 9.99 507 38 9.17 641 9.18 236 0.81 864 9.99 505 39 9.17 724 9.18 201 0.81 779 9.99 503 40 9	24					36 35
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	26					34
28 9.16 801 9.17 277 0.82 723 9.99 524 29 9.16 886 9.17 363 0.82 637 9.99 522 30 9.16 970 9.17 450 0.82 550 9.99 520 31 9.17 655 9.17 536 0.82 464 9.99 518 32 9.17 139 9.17 622 0.82 378 9.99 517 33 9.17 223 9.17 789 0.82 206 9.99 515 34 9.17 391 9.17 880 0.82 120 9.99 513 35 9.17 391 9.17 880 0.82 120 9.99 501 36 9.17 474 9.17 905 0.82 035 9.99 507 37 9.17 641 9.18 136 0.81 864 9.99 505 39 9.17 724 9.18 221 0.81 779 9.99 503 40 9.17 807 9.18 396 0.81 694 9.99 501 41 9.17 800 9.18 391 0.81 609 9.99 497 43 9.18 055 9.18 560 0.81 609 9.99 497 43 9						33
30 9.16 970 9.17 450 6.82 550 9.99 520 31 9.17 055 9.17 536 0.82 464 9.99 518 32 9.17 139 9.17 622 0.82 378 9.99 515 33 9.17 307 9.17 708 0.82 202 9.99 515 34 9.17 307 9.17 794 0.82 206 9.99 513 35 9.17 391 9.17 800 0.82 120 9.99 501 36 9.17 474 9.18 90 0.82 120 9.99 501 36 9.17 558 9.18 051 0.81 949 9.99 507 38 9.17 641 9.18 136 0.81 864 9.99 507 38 9.17 724 9.18 221 0.81 779 9.99 503 40 9.17 807 9.18 306 0.81 694 9.99 503 41 9.17 800 9.18 306 0.81 609 9.99 490 42 9.17 973 9.18 475 0.81 525 9.99 497 43 9.18 055 9.18 504 0.81 400 9.99 495 44 9.			9.17 277		9.99 524	32
31 9.17 055 9.17 536 0.82 464 9.99 518 32 9.17 139 9.17 622 0.82 378 9.99 517 33 9.17 233 9.17 708 0.82 292 9.99 515 34 9.17 307 9.17 784 0.82 206 9.99 515 35 9.17 391 9.17 880 0.82 120 9.99 501 36 9.17 474 9.17 965 0.82 035 9.99 509 37 9.17 538 9.18 051 0.81 949 9.99 507 38 9.17 641 9.18 136 0.81 864 9.99 505 39 9.17 724 9.18 221 0.81 779 9.99 503 40 9.17 807 9.18 306 0.81 694 9.99 505 41 9.17 807 9.18 306 0.81 694 9.99 501 42 9.17 973 9.18 475 0.81 525 9.99 497 43 9.18 055 9.18 560 0.81 440 9.99 497 44 9.18 132 0.81 525 9.99 497 45 9.18 220 9	29		9.17 363	$0.82\ 637$	9.99 522	31
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	30	man and the commence of	9.17 450	-0.82550	9.99 520	30
33 9.17 223 9.17 708 0.82 202 9.99 515 34 9.17 307 9.17 794 0.82 206 9.99 513 35 9.17 391 9.17 880 0.82 120 9.99 501 36 9.17 474 9.17 965 0.82 035 9.99 507 37 9.17 558 9.18 051 0.81 844 9.99 507 38 9.17 644 9.18 136 0.81 864 9.99 505 39 9.17 724 9.18 221 0.81 779 9.99 503 40 9.17 807 9.18 306 0.81 609 9.99 490 41 9.17 800 9.18 391 0.81 609 9.99 497 43 9.18 055 9.18 560 0.81 440 9.99 497 43 9.18 055 9.18 560 0.81 356 9.99 497 44 9.18 137 9.18 640 0.81 356 9.99 497 45 9.18 200 9.18 728 0.81 272 9.99 490 46 9.18 302 9.18 812 0.81 188 9.99 490 47 9						29
$\begin{array}{cccccccccccccccccccccccccccccccccccc$						28
35 9.17 391 9.17 880 0.82 120 9.99 511 36 9.17 474 9.17 965 0.82 035 9.99 509 37 9.17 558 9.18 051 0.81 949 9.99 507 38 9.17 641 9.18 136 0.81 864 9.99 505 39 9.17 724 9.18 221 0.81 779 9.99 503 40 9.17 807 9.18 396 0.81 604 9.99 501 41 9.17 803 9.18 391 0.81 609 9.99 499 42 9.17 973 9.18 475 0.81 525 9.99 497 43 9.18 655 9.18 560 0.81 440 9.99 497 43 9.18 279 9.18 644 0.81 356 9.99 494 44 9.18 137 9.18 644 0.81 356 9.99 494 45 9.18 202 9.18 812 0.81 188 9.99 492 46 9.18 362 9.18 812 0.81 188 9.99 490 47 9.18 333 9.18 806 0.81 104 9.99 488 49 9						27 26
36 9.17 474 9.17 965 0.82 035 9.99 509 37 9.17 558 9.18 051 0.81 949 9.99 507 38 9.17 641 9.18 136 0.81 864 9.99 505 39 9.17 724 9.18 221 0.81 779 9.99 503 40 9.17 807 9.18 306 0.81 609 9.99 490 41 9.17 800 9.18 391 0.81 609 9.99 497 42 9.17 973 9.18 475 0.81 525 9.99 497 43 9.18 055 9.18 560 0.81 440 9.99 495 44 9.18 137 9.18 660 0.81 356 9.99 495 44 9.18 232 9.18 728 0.81 272 9.99 490 45 9.18 302 9.18 812 0.81 188 9.99 490 46 9.18 333 9.18 812 0.81 188 9.99 490 47 9.18 363 9.18 807 0.81 021 9.99 486 48 9.18 455 9.19 9063 0.80 937 9.99 486 50						20 25
$\begin{array}{cccccccccccccccccccccccccccccccccccc$						24
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						23
40 9.17 807 9.18 306 0.81 694 9.99 501 41 9.17 800 9.18 391 0.81 609 9.99 499 42 9.17 973 9.18 475 0.81 525 9.99 497 43 9.18 055 9.18 560 0.81 440 9.99 495 44 9.18 137 9.18 644 0.81 356 9.99 494 45 9.18 220 9.18 728 0.81 272 9.99 492 46 9.18 302 9.18 812 0.81 188 9.99 490 47 9.18 365 9.18 979 0.81 021 9.99 486 48 9.18 465 9.18 979 0.81 021 9.99 486 49 9.18 547 9.19 063 0.80 937 9.99 484 50 9.18 628 9.19 146 0.80 854 9.99 482 51 9.18 700 9.19 229 0.80 771 9.99 480 52 9.18 700 9.19 312 0.80 688 9.99 478 53 9.18 871 9.19 336 0.80 605 9.99 476 54 9	38	$9.17\ 641$		0.81~864		22
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	39	9.17 724	9.18 221	0.81 779		21
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	40	9.17 807	9.18 306	0.81 694		20
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$						19
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		9.17 973				18
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						17
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$						16 15
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$						14
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						13
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						12
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	49	$9.18\ 547$		-0.80937	9.99 484	11
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	50	9.18 628	9.19 146	0.80 854	9.99 482	10
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$						9
$\begin{array}{cccccccccccccccccccccccccccccccccccc$						8
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						7
56 9.19 113 9.19 643 0.80 357 9.99 470 57 9.19 193 9.19 725 0.80 275 9.99 468 58 9.19 273 9.19 807 0.80 193 9.99 466 59 9.19 353 9.19 889 0.80 111 9.99 464						6 5
57 9.19 193 9.19 725 0.80 275 9.99 468 58 9.19 273 9.19 807 0.80 193 9.99 466 59 9.19 353 9.19 889 0.80 111 9.99 464						5 4
58 9.19 273 9.19 807 0.80 193 9.99 466 59 9.19 353 9.19 889 0.80 111 9.99 464				0.80 275		3
59 9.19 353 9.19 889 0.80 111 9.99 464						2
60 9.19 433 9.19 971 0.80 029 9.99 462						Ĩ.
	60	9.19 433	9.19 971	0.80 029	9,99 462	0
L. Cos. L. Cot. L. Tan. L. Sin.		L. Cos.	L. Cot.	L. Tan.	L. Sin.	,

	L. Sin.	L. Tan.	L. Cot.	L. Cos.	Γ –
0	9.19 433	9.19 971	0.80 029	9.99 462	60
1	9.19 513	9.20 053	0.79 947	9,99 460	59
$\frac{1}{2}$	$9.19\ 592$	9.20 134	0.79 866	9.99 458	58
$\tilde{3}$	$9.19\ 672$	9.20 216	0.79 784	9.99 456	57
4	9.19751	9.20 297	0.79 703	9.99 454	56
5	9.19 830	9.20 378	0.79 622	9.99 452	55
6	9,19 909	9.20 459 9.20 540	0.79 541	9.99 450	54
7 8	9.19 988 9.20 067	9.20 621	$0.79\ 460$ $0.79\ 379$	9.99 448	$\frac{53}{52}$
9	9.20 145	9.20 701	0.79 299	9.99 444	51
10	9.20 223	9.20 782	0.79 218	9.99 442	50
11	9.20 302	9.20 862	0.79 138	9.99 440	49
12	9.20 380	9.20 942	$0.79\ 058$	9.99 438	48
13	9.20 458	9.21 022	0.78 978	9.99 436	47
14 15	9.20 535 9.20 613	9.21 102 9.21 182	0.78 898 0.78 818	9.99 434 9.99 432	46 45
16	9.20 691	9.21 261	0.78 739	9.99 429	44
17	9.20 768	9.21 341	0.78 659	9.99 427	43
18	$9.20 \ 845$	$9.21\ 420$	0.78 580	9.99425	42
19	9.20 922	9.21 499	0.78 501	9.99423	41
20	9.20 999	9.21 578	0.78 422	9.99 421	40
21	$9.21\ 076$	$9.21\ 657$	0.78 343	9.99 419	39
22	9.21 153	9.21 736	0.78 264	9.99 417	38
$\frac{23}{24}$	9.21 229 9.21 306	9.21 814 9.21 893	$0.78\ 186 \ 0.78\ 107$	$9.9941\overline{5}$ 9.99413	37 36
$\frac{24}{25}$	9.21 382	$9.21\ 971$	0.78 029	9.99 411	35
$\frac{26}{26}$	9.21 458	9.22 049	0.77 951	9.99 409	34
27	$9.21\ 534$	$9.22\ 127$	0.77873	9.99 407	33
28	9.21 610	9.22 205	$0.7779\bar{5}$	9.99 404	32
29	9.21 685	9.22 283	0.77 717	9.99 402	31
30	9.21 761	9.22 361	0.77 639	9.99 400	30
31	9.21 836 9.21 912	9.22 438 9.22 516	0.77 562	9.99 398	29
32 ·33	$9.21\ 912$ $9.21\ 987$	9.22 516	$0.77484 \ 0.77407$	9.99 396 9.99 394	$\frac{28}{27}$
34	9.22 062	9.22 670	0.77 330	9.99 392	26
35	$9.22\ 137$	9.22747	0.77 253	9.99 390	$\frac{26}{25}$
36	$9.22\ 211$	$9.22\ 824$	0.77 176	9.99 388	24
37	$9.22\ 286$	9.22901	0.77 099	9.99 385	23
38	9.22 361	9.22 977	0.77 023	9.99 383	22
39 40	9.22 435	$\frac{9.23\ 054}{9.23\ 130}$	$\frac{0.76946}{0.76870}$	9.99 381	21 20
41	9.22 583	$\frac{-9.23 \cdot 130}{9.23 \cdot 206}$	0.76 794	9.99 377	19
42	9.22 657	9.23 283	0.76 717	9.99 375	18
43	9.22 731	9.23 359	0.76 641	9.99 372	17
44	$9.22~80\overline{5}$	$9.23 \ 43\overline{5}$	$0.76\ 565$	9.99 370	16
45	9.22878	9.23510	0.76 490	9.99 368	15
46	9.22 952	9.23 586	0.76 414	9.99 366	14
47	9.23 025 9.23 098	9.23 661	0.76 339	9.99 364	13
$\frac{48}{49}$	9.23 098	9.23 737 9.23 812	$0.76\ 263 \ 0.76\ 188$	9.99 362 9.99 359	12 11
5 0	9.23 244	9.23 887	0.76 113	9.99 357	10
51	9.23 317	9.23 962	$\frac{-0.76 038}{0.76 038}$	9.99 355	9
52	9.23 390	9.24 037	0.75 963	9.99 353	8
53	$9.23\ 462$	$9.24\ 112$	0.75 888	9.99 351	7
54	$9.23\ 53\overline{5}$	$9.24\ 186$	$0.75 \ 814$	9.99 348	- 6
55 50	9.23 607	9.24 261	0.75 739	9,99 346	5
56 57	9.23 679 9.23 752	9.24 335	0.75 665	9.99 344 9.99 342	4
58 58	9.23 452	9.24 410 9.24 484	$0.75\ 590$ $0.75\ 516$	9.99 340	$\frac{3}{2}$
59 59	9.23 895	9.24 558	0.75 442	9.99 337	î
60	9.23 967	9.24 632	0.75 368	9.99 335	Ô
	L. Cos.	I Cot		I Sin	
	L. 00s.	L. Cot.	L. Tan.	L. Sin.	

		1	<u> </u>		
,	L. Sin.	L. Tan.	L. Cot.	L. Cos.	
0	9.23 967	9.24 632	0.75 368	9.99 335	60
1	9.24 039	9.24 706	0.75 294	9.99 333	59
2 3	9.24 110 9.24 181	9.24 779 9.24 853	0.75 221 0.75 147	9.99 331 9.99 328	58 57
4	9.24 253	9.24 926	0.75 074	9.99 326	56
5	9.24 324	9.25000	0.75 000	9.99 324	55
6	9.24 395	9.25 073	0.74 927	9.99 322	54
7 8	9.24 466 9.24 536	9,25 146 9,25 219	0.74 854 0.74 781	9.99 319 9.99 317	53 52
9	9.24 607	9.25 292	0.74 708	9.99 315	51
10	9.24 677	9.25 365	0.74 635	9.99 313	50
11	9.24 748	9.25 437	0.74 563	9.99 310	49
12	9.24 818	9.25 510	0.74 490	9.99 308	48
13	9.24 888	9.25 582	0.74 418	9.99 306	47
14 15	9.24 958 9.25 028	9.25 655 9.25 727	$0.74 \ 345 \ 0.74 \ 273$	9.99 304 9.99 301	46 45
16	9.25098	9.25 799	0.74 201	9.99 299	44
17	$9.25\ 168$	9.25 871	0.74 129	9.99 297	43
18	9.25 237	9.25 943	0.74 057	9.99 294	42
19 20	9.25 307	9.26 015	0.73 985	9.99 292	41
	9.25 376	9.26 086	0.73 914	9.99 290	40
$\frac{21}{22}$	9.25 445 9.25 514	9.26 158 9.26 229	$0.73842 \\ 0.73771$	9.99 288 9.99 285	39 38
23	9.25 583	9.26 301	0.73 699	9.99 283	37
24	$9.25\ 652$	$9.26\ 372$	$0.73\ 628$	9.99 281	36
25	9.25 721	9.26 443	0.73 557	9.99 278	35
$\frac{26}{27}$	9.25 790 9.25 858	9.26 514 9.26 585	$0.73486 \\ 0.73415$	9.99 276 9.99 274	34 33
28	9.25 927	9.26 655	0.73 345	9.99 271	32
29	9.25 995	9.26726	$0.73\ 274$	9.99 269	31
30	9.26 063	9.26.797	0.73 203	9.99 267	30
31	9.26 131	9.26 867	0.73 133	9.99 264	29
32 33	9.26 199 9.26 267	9.26937 9.27008	0.73 063 0.72 992	9.99 262 9.99 260	28 27
34	9.26 335	9.27 078	0.72 922	9.99 257	26
35	9.26 403	$9.27\ 148$	0.72 852	9.99 255	25
36	9.26 470	9.27 218	0.72782	9.99 252	24
37 38	9.26 538 9.26 605	9.27 288 9.27 357	0.72712 0.72643	9,99 250 9,99 248	23 22
39	9.26 672	9.27 427	0.72 573	9.99 245	21
40	9.26 739	9.27 496	0.72 504	9,99 243	20
41	9.26 806	9.27 566	0.72 434	9.99 241	19
42	9.26873	9.27 635	$0.72\ 36\overline{5}$	9.99238	18
43	9.26 940	9.27 704 9.27 773	0.72 296	9.99 236	17
44 45	9.27 007 9.27 073	9.27 773 9.27 842	$0.72\ 227$ $0.72\ 158$	9.99 233 9.99 231	16 15
46	9.27 140	9.27 911	0.72 089	9.99 229	14
47	9.27 206	9.27 980	$0.72 \ 020$	9.99226	13
48 49	9.27 273 9.27 339	$9.28 \ 049 \ 9.28 \ 117$	$\begin{array}{c} 0.71\ 951 \\ 0.71\ 883 \end{array}$	9.99 224 9.99 221	12 11
50	9.27 405	9.28 186	0.71 883	9.89 221	10
51	9.27 471	9.28 254	0.71 746	9.99 217	9
52	9.27 471	9.28 234	0.71 677	9.99 214	8
53	$9.27\ 602$	9.28 391	$0.71\ 609$	9.99 212	7
54	9.27 668	9.28 459	0.71 541	9.99 209	6
- 55 - 56	9.27 734 9.27 799	9.28 527 9.28 595	$0.71\ 473$ $0.71\ 405$	9.99 207 9.99 204	5 4
57	9.27.861	9.28 662	0.71 338	9.90 202	3
58	9.27 930	9.28 730	$0.71\ 270$	9.99 200	2
59	9.27 995	9.28 798	0.71 202	9.99 197	1
60	9.28 000	9.28 865	0.71 135	9.99 195	0
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	•

,	L, Sin.	L. Tan.	L. Cot.	L. Cos.	
0	9.28 060	9.28 865	0.71 135	9.99 195	60
1	9.28 125	9,28 933	0.71 067	9.99 192	59
2	$9.28\ 190$	9.29 000	0.71 000	9.99 190	58
3	$9.28\ 254$	9.29~067	0.70 933	9.99 187	57
4	9.28 319	9.29 134	0.70 866	9.99 185	56
5 6	9.28 384 9.28 448	9.29 201 9.29 268	$0.70799 \\ 0.70732$	9.99 182 9.99 180	55 54
7	9.28 512	9.29 335	0.70 665	9.99 177	53
8	$9.28\ 577$	9.29 402	0.70 598	$9.99\ 17\overline{5}$	52
$-\tilde{9}$	9.28 641	$9.29\ 468$	0.70 532	$9.99\ 172$	51
10	9.28 705	9.29 535	0.70 465	9.99 170	50
11	9.28 769	9.29 601	0.70 399	$9.99 \ 167$	49
12	9.28 833 9.28 896	9.29 668 9.29 734	$\begin{bmatrix} 0.70 & 332 \\ 0.70 & 266 \end{bmatrix}$	$9.99\ 16\overline{5}$ $9.99\ 162$	48 47
13 14	9.28 960	9.29 800	0.70 200	9.99 160	46
15	9.29 024	9.29 866	0.70 134	9.99 157	45
16	9.29 087	9.29 932	0.70 068	$9.99\ 15\overline{5}$	44
17	9.29 150	9.29 998	$0.70\ 002$	$9.99\ 152$	43
18	9.29 214	9.30 064	0.69 936	$9.991\overline{5}0$	42
19	$9.29\ 277$	9.30 130	0.69 870	9.99147	41
20	9.29 340	9.30 195	0.69 805	$9.99 \ 14\overline{5}$	40
21	9.29 403	9.30 261	0.69 739	9.99 142	39
22	9.29 466	9.30 326	0.69674	9.99 140	38
23	$9.29\ 529$	9.30 391,	0.69 609	$9.99 \ 137$	37
24	9.29 591	9.30 457	0.69 543	9.99 135	36
25 26	9.29 654 9.29 716	9.30 522 9.30 587	$0.69478 \\ 0.69413$	9.99 132 9.99 130	$\frac{35}{34}$
20 27	9.29 779	9.30 652	0.69 348	9.99 127	33
$\frac{24}{28}$	9.29 841	9.30 717	0.69 283	9.99 124	$\frac{33}{32}$
29	9.29 903	9.30 782	0.69 218	9.99 122	31
30	9.29 966	9.30 846	0.69 154	9.99 119	30
31	9.30 028	9.30 911	0.69 089	9.99 117	29
32	9.30 090	9.30 975	$0.69\ 02\overline{5}$	9.99 114	28
33	9.30 151	9.31 040	0.68 960	$9.99\ 112$	27
34	9.30 213	9.31 104	0.68 896	9.99 109	26
35	$9.30\ 27\overline{5}$	9.31 168	0.68 832	9.99 106	25
36	9.30 336	9.31 233	0.68 767	9.99 104	24
37	9,30 398	9.31 297	0.68 703	9.99 101	23 22
38 39	9,30 459 9,30 521	9.31 361 9.31 425	$0.68639 \\ 0.68575$	9.99 099 9.99 096	$\frac{22}{21}$
40	9.30 582	9,31 489	0.68 511	9.99 093	20
41	9.30 643	9.31 552	0.68 448	9.99 091	19
42	9.30 704	9.31 616	0.68 384	9.99 088	18
43	9.30 765	9.31 679	0.68 321	9.99 086	17
44	9.30 826	9.31 743	$0.68\ 257$	9.99 083	16
45	9.30 887	9.31 806	0.68 194	9.99 080	15
46	9.30 947	9.31 870	0.68 130	9.99 078	14
47	9.31 008	9.31 933	0.68 067	9.99 075	13
48 49	9.31 068 9.31 129	9.31 996 9.32 059	0.68 004 0.67 941	9.99072 9.99070	12 11
50	9.31 189	9.32 122	0.67 878	9.99 067	10
51	9.31 250	9.32 185	0.67 815	9.99 064	9
$\frac{52}{52}$	9.31 310	9.32 248	0.67 752	9.99 062	
53	$9.31\ 370$	9.32 311	$0.67\ 689$	9.99059	8 7
54	9.31 430	$9.32\ 373$	$0.67\ 627$	9.99 056	- 6
55	9.31 490	9.32 436	0.67 564	9.99 054	5
56	9.31 549	9.32 498	$0.67\ 502$	9.99 051	3
57	9.31 609 9.31 669	9.32 561 9.32 623	0.67 439	9.99 048 9.99 046	3 2
58 59	9.31 728	9.32 685	$0.67 \ 377 \ 0.67 \ 315$	9.99 043	1
60	9.31 788	9.32 747	0.67 253	9.99 040	ō
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	-
	L. 003.		Oo	L. JIII.	

		10			
,	L. Sin.	L. Tan.	L. Cot.	L. Cos.	
0	9.31 788	9.32 747	0.67 253	9.99 040	60
1	9.31 847	9.32 810	0.67 190	9.99 038	59
2	9.31 907	9.32872	0.67 128	9.99 035	58
3	9.31 966	9.32 933	0.67 067	9.99 032	57
4	9.32 025 9.32 084	9,32 995 9,33 057	0.67 005 0.66 943	9.99 030 9.99 027	56 55
5 6	9.32 143	9.33 119	0.66 881	9.99 024	54
7	9.32 202	9.33 180	0.66 820	9.99 022	53
8	9.32 261	9,33 242	0.66 758	9.99 019	52
9	$9.32\ 319$	9.33 303	0.66 697	9.99016	-51
10	9.32 378	9.33 365	0.66 635	9.99 013	50
11	9.32 437	9.33 426	0.66 574	9.99 011	49
12	9.32 495	9.33 487	0.66 513	9.99 008	48
13	9.32 553	9.33 548	0.66 452	9.99 005	47
14 15	9.32 612 9.32 670	9.33 609 9.33 670	0.66 391 0.66 330	9.99 002 9.99 000	46 45
16	9.32 728	9.33 731	0.66 269	9.98 997	44
17	9.32 786	9.33 792	0.66 208	9.98 994	43
18	9.32 844	9,33 853	0.66 147	9.98 991	42
19	9,32 902	9.33 913	-0.66087	9.98 989	41
20	9.32 960	9.33 974	0.66 026	9,98 986	40
21	9.33 018	9.34 034	0.65 966	9.98 983	39
22	9.33 075	9.34 095	0.65 905	9.98 980	38
23 24	9,33 133 9,33 190	9.34 155 9.34 215	-0.65 845	9.98 978 9.98 975	37 36
25	9.33 248	9.34 276	0.65 785 0.65 724	9.98 972	35
26	9.33 305	9.34 336	0.65 664	9.98 969	34
27	9.33 362	9.34 396	0.65 604	9.98 967	33
28	9.33420	9.34 456	0.65544	9.98 964	32
29	9.33 477	9.34 516	0.65 484	9.98 961	31
30	9.33 534	9.34 576	0.65 424	9.98 958	30
31	9,33 591	9.34 635	0.65 365	9.98 955	29
32 33	9.33 647	9.34 695 9.34 755	0.65 305 0.65 245	9.98 953 9.98 950	$\frac{28}{27}$
34	9.33 704 9.33 761	9.34 814	0.65 245	9.98 947	26
35	9.33 818	9.34 874	0.65 126	9.98 944	25
36	9.33 874	9.34 933	0.65 067	9,98 941	24
37	9.33931	9.34 992	0.65 008	9,98 938	23
38	9.33 987	9.35 051	0.64 949	9.98 936	22
39	9.34 043	9.35 111	0.64 889	9.98 933	21
40	9.34 100	9.35 170	0.64 830	9.98 930	20
41 42	9.34 156 9.34 212	9,35 229 9,35 288	$0.64\ 771$ $0.64\ 712$	9.98 927 9.98 924	19
43	9.34 268	9.35 347	0.64 653	9.98 921	18 17
44	9.34 324	9.35 405	0.64 595	9.98 919	16
45	9.34 380	9.35 464	0.64 536	9.98 916	15
46	9.34 436	9.35 523	0.64 477	9.98 913	14
47	9.34 491	9.35 581	0.64 419	9.98 910	13
48	9.34 547	9.35 610	0.64 360	9.98 907 9.98 904	12
49 50	9.34 602	9.35 698	$-\frac{0.64\ 302}{0.64\ 243}$	9.98 904	11 10
51	9.34 713	9.35 815	0.64 185	9.98 898	9
52	9.34 769	9.35 873	0.64 127	9.98 896	
53	9.34 824	9.35 931	0.64069	9.98 893	8 7
54	9.31 879	9,35 989	0.64 011	9.98 890	6
55	9.34 934	9.36 047	0.63 953	9,98 887	5
56	9,34 989	9.36 105	0.63 895	9.98 884	4 2
. 57 58	9,35 044 9,35 099	9.36 163 9.36 221	0.63 837 0.63 779	9.98 881	3 2
59	9.35 154	9.36 279	0.63 721	9.98 875	1
60	9.35 209	9.36 336	0.63 664	9.98 872	0
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	,

10					
'	L. Sin.	L. Tan.	L. Cot.	L. Cos.	
0	9.35 209	9,36 336	0.63 664	9.98 872	60
1	9.35 263	9,36 394	0.63 606	9,98 869	59
2	9.35 318	9.36 452	0.63 548	9.98 867	58
3	9.35 373	9,36 509	0.63 491	9.98 864	57
4	9.35 427 9.35 481	9,36 566 9,36 624	0.63 434 0.63 376	9.98 861 9.98 858	56 55
5 6	9.35 536	9.36 681	0.63 319	9.98 855	54
7	9.35 590	9.36 738	$0.63\ 262$	9.98852	53
8	9,35 644	9,36 795	$0.63\ 205$	9.98 849	52
9	9.35 698	9.36 852	0.63 148_	9.98 846	51
10	$9.35\ 752$	9,36 909	0.63 091	9.98 843	50
11	9.35 806	9.36 966	0.63 034	9.98 840	49
12	9.35 860	9.37 023	0.62 977	9.98 837	48
13	9.35914 9.35968	9.37 080 9.37 137	$0.62920 \\ 0.62863$	9.98 834 9.98 831	47 46
14 15	9.36 022	9.37 137 9.37 193	0.62 807	9.98 828	45
16	9.36 075	9,37 250	0.72 750	9,98 825	44
17	9.36 129	9.37 306	0.62 694	$9.98\ 822$	43
18	9,36 182	9.37 363	$0.62\ 637$	9.98819	42
19	9.36 236	9,37 419	-0.62581	9.98 816_	41
20	$9.36\ 289$	9.37 476	$0.62\ 524$	$9.98\ 813$	40
21	9,36 342	9,37 532	0.62 468	9.98 810	39
22	9.36 395	9.37 588	0.62 412	9.98 807	38 37
$\frac{23}{24}$	9.36 449 9.36 502	9.37 644 9.37 700	0.62 356 0.62 300	9.98 804 9.98 801	36
$\frac{24}{25}$	9.36 555	9.37 756	0.62 244	9.98 798	35
26	9,36 608	9.37 812	0.62 188	9.98 795	34
$\overline{27}$	9.36 660	9.37 868	$0.62\ 132$	9.98792	33
28	9.36713	9.37 924	$0.62\ 076$	9.98789	32
29	9.36 766	9.37 980	0.62 020	9.98 786	31
30	9.36 819	9.38 035	0.61 965	9.98 783	30
31	9.36 871	9.38 091	0.61 909	9.98 780	29
32 33	9.36 924	9.38.147	0.61 853	9.98 777 9.98 774	28 27
34	9.36 976 9.37 028	9.38 202 9.38 257	$0.61798 \\ 0.61743$	9.98 771	26
35	9.37 081	9.38 313	0.61 687	9.98 768	25
36	9.37 133	9.38 368	$0.61\ 632$	$9.98\ 76\overline{5}$	24
37	$9.37\ 185$	9.38 423	0.61 577	9.98762	23
38	9.37 237	9.38 479	0.61 521	9.98 759	22
39	9.37 289	9.38 534	0.61 466	9.98 756	21
40	9.37 341	9.38 589	0.61 411	9.98 753	20
41	9.37 393 9.37 445	9.38 644 9.38 699	$0.61\ 356 \ 0.61\ 301$	9.98 750 9.98 746	19 18
42 43	9.37 497	9.38 699	0.61 301	9.98 743	17
44	9.37 549	9.38 808	0.61 192	9.98 740	16
45	9.37600	9.38 863	0.61 137	9.98 737	15
46	9.37 652	9.38 918	0.61 082	9.98 734	14
47	9.37 703	9.38 972	0.61 028	9.98 731	13
48 49	9.37 755 9.37 806	9.39 027 9.39 082	0.60973 0.60918	$9.98728 \\ 9.98725$	12 11
50	9.37 858	9.39 136	0.60 864	9.98 722	10
51	9.37 909	9.39 190	0.60 810	9.98 719	9
52	9.37 960	9.39 199	0.60 510	9.98 715	8
53	9.38 011	9.39 299	0.60 701	9.98712	7
54	$9.38\ 062$	9.39 353	0.60 647	9.98 709	- 6
55	9.38 113	9.39 407	0.60 593	9.98 706	5
56	9.38 164	9.39 461	0.60 539	9.98 703	$\frac{4}{3}$
57 58	9.38 215 9.38 266	9.39 515 9.39 569	$0.6048\overline{5} \\ 0.60431$	9.98 700 9.98 697	$\frac{\delta}{2}$
59	9.38 317	9.39 623	0.60 377	9.98 694	ĩ
60	9.38 368	9.39 677	0.60 323	9.98 690	0
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	. /

		14			
,	L. Sin.	L. Tan.	L. Cot.	L. Cos.	
0	9.38 368	9.39 677	0.60 323	9.98 690	60
1	9.38 418	9.39 731	0.60 269	9.98 687	59
2 3	9.38 469 9.38 519	9.39 785 9.39 838	$0.60\ 215$ $0.60\ 162$	9.98 684 9.98 681	58 57
4	9.38 570	9.39 892	0.60 102	9.98 678	56
5	9.38 620	9.39 945	$0.60\ 055$	9.98 675	55
- 6	$9.38\ 670$	9.39 999	0.60 001	9.98 671	54
7	9.38 721	9.40 052	0.59 948	9.98 668	53
8 9	9.38 771	9,40 106	0.59 894	9.98 665	52
	9.38 821	9.40 159	0.59 841	9.98 662	51
10	9.38 871	9.40 212	0.59 788	9.98 659	50
11 12	9.38 921 9.38 971	9.40 266 9.40 319	$0.59734 \\ 0.59681$	9.98 656 9.98 652	49 48
13	9.39 021	9.40 372	0.59 628	9.98 649	47
14	9.39 071	9,40 425	0.59 575	9.98 646	46
15	$9.39\ 121$	9.40 478	$0.59\ 522$	9.98 643	45
16	9.39 170	9.40 531	0.59 469	9.98 640	44
17	9.39 220	9.40 584	0.59 416	9.98 636	43
18 19	9.39 270 9.39 319	9.40 636 9.40 689	$0.59\ 364$ $0.59\ 311$	9,98 633 9,98 630	42 41
20	9.39 369	9.40 742	0.59 258	9.98 627	40
21	9.39 418	9.40 795	0.59 205	9.98 623	39
$\frac{21}{22}$	9.39 467	9.40 733	0.59 153	9.98 620	38
23	9.39 517	9.40 900	0.59 100	9.98 617	37
24	$9.39\ 566$	9.40 952	0.59 048	9.98 614	36
25	$9.3961\overline{5}$	$9.41\ 005$	0.58 995	9.98 610	35
26	9.39 664	9.41 057	0.58 943	9,98 607	34
$\frac{27}{28}$	9.39713 9.39762	9.41 109 9.41 161	$0.58891 \\ 0.58839$	9.98 604 9.98 601	33 32
29	9.39 811	9.41 214	0.58 786	9.98 597	31
30	9.39 860	9.41 266	0.58 734	9.98 594	30
31	9.39 909	9.41 318	0.58 682	9.98 591	29
32	9.39 958	9.41 370	0.58 630	9.98 588	28
33	$9.40 \ 006$	9.41 422	0.58 578	9.98 584	27
34	9.40 055	9.41 474	0.58 526	9.98 581	26
35 36	9.40 103 9.40 152	9.41 526 9.41 578	$0.58474 \\ 0.58422$	9.98 578 9.98 574	$\frac{25}{24}$
37	9.40 200	9.41 629	0.58 371	9.98 571	23
38	9.40 249	9,41 681	0.58 319	9.98 568	22
39	$9.40\ 297$	9,41 733	$0.58\ 267$	9,98 565	21
40	9.40 346	9.41 784	0.58 216	9.98 561	20
41	9,40 394	9.41 836	0.58 164	9.98 558	19
42	9.40 442	9.41 887	0.58 113	9.98 555	18
43	9.40 490	9.41 939	0.58 061	9.98 551	17
44	9.40 538 9.40 586	9.41 990 9.42 041	$0.58\ 010$ $0.57\ 959$	9.98 548 9.98 545	16 15
46	9.40 634	9.42 093	0.57 907	9.98 541	14
47	$9.40\ 682$	9.42 144	0.57 856	9.98 538	13
48	9.40 730	9.42 195	0.57 805	9.98 535	12
49	9.40 778	9.42 246	0.57.754	9.98 531	11
50	9.40 825	9.42 297	0.57 703	9.98 528	10
51	9.40 873	9.42 348	0.57 652	9.98 525	9
52 53	9.40 921 9.40 968	9.42 399 9.42 450	$0.57\ 601$ $0.57\ 550$	9.98 521 9.98 518	8 7
54	9.40 968	9.42 450	0.57 550	9.98 515	6
55	9,41 063	9.42 552	0.57 448	9.98 511	5
56	9.41 111	9.42 603	0.57 397	9.98 508	4
57	9.41 158	9.42 653	0.57 347	9.98 505	3
58	9.41 205	9.42 704	0.57 296	9.98 501	$\frac{2}{1}$
59 60	9.41 252 9.41 300	9.42 755	0.57 245 0.57 195	9.98 498	0
-					,
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	

		16	<u> </u>		
,	L. Sin.	L. Tan.	L. Cot.	L. Cos.	
0	9,41 300	9.42 805	0.57 195	9.98 494	60
1	9.41 347	9.42 856	0.57 144	9.98 491	59
2	9.41 394	9.42 906	0.57 094	9.98 488	58
$\bar{3}$	9.41 441	$9.42\ 957$	0.57 043	9.98 484	57
4	$9.41\ 488$	9.43 007	0.56 993	9.98 481	56
5	9.41 535	9.43 057	0.56 943	9.98 477	55
6	9.41 582	9.43 108	0.56 892	9.98 474 9.98 471	54
7	9.41 628 9.41 675	9.43 158 9.43 208	$0.56842 \\ 0.56792$	9.98 467	$\frac{53}{52}$
8 9	9.41 722	9.43 258	0.56 742	9.98 464	51
10	9.41 768	9.43 308	0.56 692	9.98 460	50
11	9.41 815	9.43 358	0.56 642	9.98 457	49
12	9.41 861	9.43 408	0.56 592	9.98 453	48
13	9,41 908	9.43 458	$0.56\ 542$	9.98450	47
14	9.41 954	$9.43\ 508$	$0.56\ 492$	9.98 447	46
15	9.42 001	9.43 558	0.56 442	9.98 443	45
16	9.42 047	9.43 607	0.56 393	9.98 440	44
17 18	9.42 093 9.42 140	9.43 657 9.43 707	0.56 343 0.56 293	9.98 436 9.98 433	$\frac{43}{42}$
19	9.42 186	9.43 756	0.56 244	9.98 429	41
20	9.42 232	9.43 806	0.56 194	9.98 426	40
21	9,42 278	9.43 855	0.56 145	9.98 422	39
22	9.42 324	$9.43\ 90\overline{5}$	0.56 095	9.98 419	38
23	$9.42\ 370$	9.43954	0.56~046	$9.98\ 415$	37
24	$9.42\ 416$	$9.44\ 004$	0.55 996	$9.98\ 412$	36
25	9.42 461	9.44 053	0.55 947	9.98 409	35
26	9.42 507 9.42 553	9.44 102 9.44 151	0.55 898 0.55 849	$9.98\ 405$ $9.98\ 402$	34 33
$\frac{27}{28}$	9.42 599	9.44 201	0.55 799	9.98 398	32
29	9.42 644	9.44 250	0.55 750	$9.98\ 39\overline{5}$	31
30	9,42 690	9.44 299	0.55 701	9.98 391	30
31	9,42 735	9.44 348	0,55 652	9.98 388	29
32	$9.42\ 781$	9.44 397	0.55 603	$9.98\ 384$	28
33	9.42~826	$9.44 \ 446$	0.55 554	9.98 381	27
34	9.42 872	9.44 495	0.55 505	9.98 377	26
35	9.42 917 9.42 962	9.44 514 9.44 592	0.55 456	9.98 373 9.98 370	$\frac{25}{24}$
36 37	9,42 902 9,43 008	9.44 641	$0.55\ 408$ $0.55\ 359$	9.98 366	$\frac{24}{23}$
38	9.43 053	9.44 690	0.55 310	9.98 363	22
39	9.43 098	9.44 738	$0.55\ 262$	9.98 359	21
40	9.43 143	9.44 787	0.55 213	9,98 356	20
41	9.43 188	$9.44\ 836$	0.55 164	9.98 352	19
42	9.43 233	9.44 884	0.55 116	9.98 349	18
43	9.43 278 9.43 323	9.44 933 9.44 981	0.55 067	9.98 345 9.98 342	17
44 45	9.43 367	9.44 981 9.45 029	0.55 019 0.54 971	9.98 338	16 15
46	9.43 412	9.45 028	0.54 922	9,98 334	14
47	9.43 457	9,45 126	0.54 874	9.98 331	13
48	$9.43\ 502$	9.45 174	0.54 826	9.98 327	12
49	9.43 546	9.45 222	0.54 778	9.98 324	11
50	9.43 591	9.45 271	0.54 729	9.98 320	10
51 52	9.43 635 9.43 680	9.45 319 9.45 367	$0.54\ 681$ $0.54\ 633$	9.98 317 9.98 313	9 8
53	9.43 724	9.45 415	0.54 585	9.98 309	7
54	9.43 769	9.45 463	0.54 537	9.98 306	6
55	9.43 813	9.45 511	0.54 489	$9.98\ 302$	5
56	9,43 857	9.45 559	0.54 441	9.98 299	4
57	9.43 901	9.45 606	0.54 394	9.98 295	3
58 59	9.43 946 9.43 990	9.45 654 9.45 702	0.54 346 0.54 298	9.98 291 9.98 288	$\frac{2}{1}$
60	9.44 034	9.45 750	0.54 250	9.98 284	Ô
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	,

_		1/					
/	L. Sin.	L. Tan.	L. Cot.	L. Cos.			
0	9.44 034	9.45 750	0.54 250	9.98 284	60		
1	9.44 078	9,45 797	0.54 203	9.98 281	59		
2 3	9.44 122	9.45 845	0.54 155	9.98 277	58		
4	9.44 166 9.44 210	9.45 892 9.45 940	0.54 108 0.54 060	9.98 273 9.98 270	57 56		
5	9.44 253	9.45 987	0.54 013	9.98 266	55		
6	9.44 297	9.46 035	0.53 965	9.98 262	54		
7	9.44 341	9.46 082	0.53 918	9,98 259	53		
8	9.44 385	9.46 130	0.53 870	9.98 255	52		
9	9.44 428	9.46 177	0.53 823	9.98 251	51		
10	9.44 472	9.46 224	0.53 776	9.98 248	50		
11	9.44 516	9.46 271	0.53 729	9.98 244	49		
12 13	9,44 559 9,44 602	9.46 319 9.46 366	$0.53681 \\ 0.53634$	9.98 240 9.98 237	48 47		
14	9.44 646	9.46 413	0.53 587	9.98 233	46		
15	9.44 689	9.46 460	0.53 540	9.98 229	45		
16	9.44 733	9.46 507	0.53 493	9.98 226	44		
17	9.44 776	9.46 554	0.53 446	9.98 222	43		
18 19	9.44 819 9.44 862	9.46 601 9.46 648	0.53 399 0.53 352	$9.98 \frac{218}{215}$ $9.98 \frac{215}{215}$	42		
20					41		
	9.44 905	9.46 694	0.53 306	9.98 211	40		
21 22	9,44 948 9,44 992	9.46 741 9.46 788	$0.53\ 259$ $0.53\ 212$	9.98 207 9.98 204	39 38		
23	9.45 035	9,46 835	0.53 165	9.98 200	37		
24	9.45 077	9.46 881	0.53 119	9.98 196	36		
25	9.45 120	9.46 928	$0.53\ 072$	9.98 192	35		
26	9.45 163	9.46975	$0.53\ 025$	9.98 189	34		
27	9.45 206 9.45 249	9.47 021	0.52 979	9.98 185	33		
28 29	9.45 292	9.47 068 9.47 114	$0.52932 \\ 0.52886$	9.98 181 9.98 177	32 31		
30	9,45 334	9,47 160	0.52 840	9.98 174	30		
				9.98 170			
31 32	9.45 377 9.45 419	9.47 207 9.47 253	$0.52793 \\ 0.52747$	9.98 170	29 28		
33	9.45 462	9.47 299	0.52 701	9.98 162	27		
34	9,45 504	9.47 346	$0.52\ 654$	9.98 159	26		
35	9.45 547	9.47 392	$0.52\ 608$	9.98 155	25		
36 37	9.45 589 9.45 632	9.47 438 9.47 484	0.52 562	9.98 151 9.98 147	24		
38	9.45 674	9.47 530	$0.52\ 516$ $0.52\ 470$	9,98 144	23 22		
39	9.45 716	9.47 576	0.52 424	9.98 140	21		
40	9.45 758	9.47 622	0.52 378	9.98 136	20		
41	9.45 801	9.47 668	0.52 332	9.98 132	19		
42	9.45 813	9.47 714	0.52 286	9.98 129	18		
43	9.45 885	9.47 760	$0.52\ 240$	9.98 125	17		
44	9.45 927	9.47 806	0.52 194	9.98 121	16		
45	9.45 969 9.46 011	9.47 852 9.47 897	$0.52\ 148$ $0.52\ 103$	9.98 117 9.98 113	15 14		
46 47	9.46 053	9.47 897 9.47 943	$0.52\ 103$ $0.52\ 057$	9.98 110	13		
48	9.46 095	9.47 989	0.52 011	9,98 106	12		
49	9.46 136	$9,48.03\overline{5}$	0.51 965	$9.98 \cdot 102$	11		
50	9.46 178	9.48 080	0.51 920	9,98 098	10		
51	9.46 220	9.48 126	0.51 874	19.98 094	9		
52	$9.46 \ 262$	9.48 171	0.51 829	9,98 090	8		
53	9.46 303	9.48 217	0.51 783	9.98 087	7		
54 55	9.46 345 9.46 386	9.48 262 9.48 307	$0.51\ 738$ $0.51\ 693$	9,98 083 9,98 079	6 5		
56	9.46 428	9.48 353	0.51 647	9.98 075	4		
57	9.46 469	9.48 398	0.51 602	9.98 071	3		
58	9.46 511	9.48 443	0.51 557	9,98 067	2		
59	9.46 552	9.48 489	0.51 511	9,98 063	1		
60	9.46 594	9.48 534	0.51 466	9.98 060	0		
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	,		
	HO.						

,	L. Sin.	L. Tan.	L. Cot.	L. Cos.	
0	9.46 594	9.48 534	0.51 466	9,98 060	60
1	9.46 635	9,48 579	0.51 421	9.98 056	59
2	9.46 676	$9.48\ 624$	$0.51\ 376$	$9.98\ 052$	58
3	9.46 717	9.48 669	$0.51\ 331$	$9.98\ 048$	57
4	9.46 758	9.48 714 9.48 759	$\begin{array}{c} 0.51\ 286 \\ 0.51\ 241 \end{array}$	9.98 044 9.98 040	56
5	9,46 800 9,46 841	9.48 804	0.51 196	9.98 036	55 54
7	9.46 882	9.48 849	0.51 151	9.98 032	53
8	9.46 923	9.48 894	0.51 106	9.98 029	52
9	9.46 964	9.48 939	0.51 061	9.98 025	51
10	9.47 005	9.48 984	0.51 016	9.98 021	50
11	9.47 045	9.49 029	0.50 971	9.98 017	49
12 13	9.47 086 9.47 127	9.49 073 9.49 118	$\begin{array}{c} 0.50\ 927 \\ 0.50\ 882 \end{array}$	9.98 013 9.98 009	48 47
14	9.47 168	9.49 163	0.50 837	9.98 005	46
15	9.47 209	9.49 207	0.50 793	9.98 001	45
16	9.47 249	$9.49\ 252$	0.50 748	9.97 997	44
17	9,47 290	9,49 296	$0.50\ 704$	9.97 993	43
18	9.47 330	9.49 341	0.50 659	9.97 989	42
19	9.47 371	9.49 385	0.50 615	9.97 986	41
20	9.47 411	9.49 430	0.50 570	9.97 982	40
$\frac{21}{22}$	9.47 452	9.49 474 9.49 519	$0.50\ 526$ $0.50\ 481$	9.97 978 9.97 974	39
$\frac{22}{23}$	9.47 492 9.47 533	9.49 563	0.50 437	9.97 970	38 37
$\frac{20}{24}$	9.47 573	9.49 607	0.50 393	9.97 966	36
$\overline{25}$	9.47 613	9.49 652	0.50 348	9.97 962	35
26	9.47 654	9.49 696	$0.50\ 304$	9.97.958	34
27	9.47 694	9.49 740	0.50 260	9.97954	33
28	9.47 734	9.49 784	$0.50\ 216 \\ 0.50\ 172$	9.97 9 5 0 9.97 946	32
29 30	9.47 774	$\frac{9.49828}{9.49872}$	$\frac{0.50172}{0.50128}$	9.97 942	31 30
31	9.47 854	9.49 916	0.50 084	9.97 938	29
32	9.47 894	9.49 960	0.50 040	9.97 934	28
33	9.47 934	9.50 04	0.49 996	9.97 930	27
34	9.47 974	9.50 048	0.49 952	9.97 926	26
35 36	9.48 014 9.48 054	9.50 092 9.50 136	0.49 908 0.49 864	9.97 922 9.97 918	$\frac{25}{24}$
37	9.48 094	9.50 180	0.49 820	9.97 914	23
38	9.48 133	9.50 223	0.49 777	9.97 910	22
39	9.48 173	9.50 267	0.49733	9.97 906	21
40	9.48 213	9.50 311	0.49 689	9.97 902	20
41	$9.48\ 252$	$9.50 \ 35\overline{5}$	0.49645	9.97 898	19
42	9.48 292	9.50 398	0.49 602	9.97 894	18
43 44	9.48 332 9.48 371	9.50 442 9.50 485	0.49558 $0.4951\overline{5}$	9.97 890 9.97 886	17
45	9.48 411	9,50 529	0.49 471	9.97 882	16 15
46	9.48 450	9.50 572	0.49428	9.97 878	14
47	$9.48\ 490$	9.50 616	$0.49\ 384$	9.97 874	13
48	9.48 529	9.50 659	0.49 341	9.97 870	12
49	9.48 568	9.50 703	0.49 297	9.97 866	11
50 51	9.48 607	9.50 746	$\frac{0.49\ 254}{0.49\ 211}$	9.97 861	10
51 52	9.48 686	9.50 789	$0.49\ 211$ $0.49\ 167$	9.97 853	9 8
53	9.48 725	9.50 876	0.49 124	9.97 849	7
54	9.48 764	9.50 919	0.49 081	9.97 845	6
55	9.48 803	9.50 962	0.49 038	9.97 841	6 5
56	9.48 842	9.51 005	0.48 995	9.97 837	4
57 58	9.48 881 9.48 920	9.51 048 9.51 092	$0.48952 \\ 0.48908$	9.97 833 9.97 829	$\frac{3}{2}$
59	9.48 959	9.51 135	0.48 865	9.97 825	1
60	9.48 998	9.51 178	0.48 822	9.97 821	Ô
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	,
	,,	_, 500.	-, , an,	L. 0111.	i '

10							
'	L. Sin.	L. Tan.	L. Cot.	L. Cos.			
0	9.48 998	9.51 178	0.48 822	9.97 821	60		
1	9.49 037	9.51 221	0.48 779	9.97 817	59		
2	9.49 076	9.51 264	0.48 736	9.97 812	58		
3	9.49 115	9.51 306	0,48 694	9.97 808	57		
4	9.49 153	9.51 349	0.48 651	9.97 804	56		
5	9.49 192	9.51 392	$0.48\ 608$	9.97 800	55		
6	9.49 231	9.51 435	0.48 565	9.97 796	54		
7 8	9.49 269 9.49 308	9.51 478 9.51 520	$0.48\ 522$ $0.48\ 480$	9.97 792 9.97 788	53 52		
9	9.49 347	9.51 563	0.48 437	9.97 784	51		
10	9.49 385	9.51 606	0.48 394	9.97 779	50		
11	9.49 424	9.51 648	0.48 352	9.97 775	49		
12	9.49 462	9.51 691	0.48 309	9.97 771	48		
13	9.49 500	9.51 734	0.48 266	9.97 767	47		
14	9.49.539	9.51 776	0.48224	9.97 763	46		
15	$9.49\ 577$	9.51 819	0.48 181	9.97 759	45		
16	9.49 615	9.51 861	0.48 139	9.97 754	44		
17	9.49 654	9.51 903	0.48 097	9.97 750	43		
18 19	9.49 692 9.49 730	9.51 946 9.51 988	$0.48\ 054 \\ 0.48\ 012$	9.97 746 9.97 742	42 41		
20	9.49 768	9.52 031	0.47 969		1		
21					40		
$\frac{21}{22}$	9.49 806 9.49 844	9.52 073 9.52 115	$0.47927 \\ 0.47885$	9.97 73 <u>4</u> 9.97 729	39 38		
23	9.49 882	9.52 157	0.47 843	9.97 725	37		
24	9.49 920	9.52 200	0.47 800	9.97 721	36		
25	9.49 958	9.52 242	0.47 758	9.97 717	35		
26	9.49 996	$9.52\ 284$	0.47 716	9.97 713	34		
27	$9.50 \ 034$	9.52 326	0.47 674	9.97 708	33		
28 29	9.50 072	9.52 368	0.47 632	9.97 704	32		
	9.50 110	9.52 410	0.47 590	9.97 700	31		
30	9.50 148	9.52 452	0.47 548	9.97 696	30		
31 32	9.50 185	9.52 494	0.47 506	9.97 691 9.97 687	29		
33	9.50 223 9.50 261	9.52 536 9.52 578	$0.47 \ 464$ $0.47 \ 422$	9.97 683	28 27		
34	9.50 201	9.52 620	0.47 380	9.97 679	26		
35	9.50 336	9.52 661	0.47 339	9.97 674	25		
36	9.50 374	9.52 703	0.47 297	9.97 670	24		
37	$9.50\ 411$	9.52 745	$0.47\ 255$	9.97 666	23		
38	9.50 449	9.52 787	0.47 213	9.97 662	22		
39	9.50 486	9.52 829	0.47 171	9.97 657	21		
40	9.50 523	9.52 870	0.47 130	9,97 653	20		
41	9.50 561	9.52 912	0.47 088	9.97 649	19		
42 43	9,50 598 9,50 635	9.52 953 9.52 995	0.47 047 0.47 005	9.97 645 9.97 640	18		
44	9.50 673	9,53 037	0.47 003	9.97 636	17 16		
45	9.50 710	9.53 078	0.46 922	9.97 632	15		
46	9.50 747	9.53 120	0.46 880	9.97 628	14		
47	9.50.784	9.53 161	0.46 839	9.97 623	13		
48	9.50 821	9.53 202	0.46 798	9.97 619	12		
49	9,50 858	9.53 244	0.46 756	9.97 615	11		
50	9.50 896	9.53 285	0.46 715	9.97 610	10		
51	9.50 933	9.53 327	0.46 673	9.97 606	9		
52 53	9.50 970 9.51 007	9.53 368 9.53 409	$0.46\ 632$ $0.46\ 591$	9.97 602 9.97 597	8 7		
54	9.51 007	9.53 450	0.46 550	9.97 593	6		
55	9.51 080	9.53 492	0.46 508	9.97 589			
56	9.51 117	9,53 533	0.46 467	9,97 584	5 4		
57	9.51-154	9.53 574	$0.46\ 426$	9.97.580	3		
58	9.51 191	9.53 615	0.46~385	9.97 576	2		
59	9.51 227	9,53 656	0.46 344	9.97 571			
60	9.51 204	9.53 697	0.46 303	9.97 567	0		
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	,		
	71°						

10					
	L. Sin.	L. Tan.	L. Cot.	L. Cos.	
0	9.51 264	9,53 697	0.46 303	9.97 567	60
1	9.51 301	9.53 738	0.46 262	9.97 563	59
2	9.51 338	9.53 779	$0.46\ 221$	$9.97\ 558$	58
3	9.51 374	9.53 820 9.53 861	0.46 180	9,97 554	57
4 5	9.51 411 9.51 447	9,53 902	$0.46\ 139$ $0.46\ 098$	9.97 550 9.97 545	56 55
6	9.51 481	9.53 943	0.46 057	9.97 541	54
7	9.51 520	9.53 984	0.46 016	9.97.536	53
8	9.51 557	9.54 025	0.45 975	9.97 532	52
9	9.51 593	9.54 065	0.45 935	9.97 528	51
10	9,51 629	9.54 106	0.45 894	9.97 523	50
$\frac{11}{12}$	9.51 666 9.51 702	9.54 147 9.54 187	$0.45853 \\ 0.45813$	9.97 519 9.97 515	49 48
13	9.51 738	9.54 228	0.45772	9.97 510	47
14	9.51 774	9.54 269	0.45 731	9.97 506	46
15	9.51 811	9.54 309	0.45 691	9.97 501	45
16	9.51 847	9.54 350	0.45 650	9.97 497	44
17 18	9.51 883 9.51 919	9.54 390 9.54 431	$0.45610 \\ 0.45569$	9.97 492 9.97 488	$\frac{43}{42}$
19	9.51 955	9.54 471	0.45 529	9.97 484	41
20	9.51 991	9.54 512	0.45 488	9.97 479	40
21	-9.52027	9.54 552	0.45 448	9.97 475	39
22	9.52 063	9.54 593	0.45 407	9.97 470	38
23	$9.52\ 099$	9.54 633	0.45 367	9.97 466	37
24	9.52 135	9.54 673	0.45 327	9.97 461	36
$\frac{25}{26}$	9.52 171 9.52 207	9.54 714 9.54 754	$0.45\ 286 \ 0.45\ 246$	9.97 457 9.97 453	35 34
$\frac{20}{27}$	$9.52\ 207$ $9.52\ 242$	9.54 794	0.45 246	9.97 448	33
28	9.52 278	$9.54 \ 83\overline{5}$	0.45 165	9.97 444	32
2 9	$9.52\ 314$	$9.54 \ 87\overline{5}$	0.45 125	9.97 439	31
30	9.52 350	9.54 915	0.45 085	9.97 435	30
31	9.52 385	9.54 955	0.45 045	9.97 430	29
32	9.52 421	9.54 995	$0.45 00\overline{5}$	9.97 426	28
33 34	9.52 456	9.55 035	0.44 965	9.97 421 9.97 417	27 26
35	$9.52\ 492$ $9.52\ 527$	$9.55\ 075$ $9.55\ 115$	$0.4492\overline{5} \\ 0.4488\overline{5}$	9.97 412	25 25
36	9.52 563	9.55 155	0.44 845	9.97 408	24
37	$9.52\ 598$	9,55 195	$0.44 \ 80\overline{5}$	9.97 403	23
38	9.52 634	9.55 235	0.44765	9.97 399	22
39	9,52 669	9.55 275	0.44 725	9.97 394	21
40	$9.52\ 70\overline{5}$	9.55 315	0.44 685	9.97 390	20
41	9.52 740	9.55 355	0.44 645	9.97 385	19
42 43	9.52 775 9.52 811	9.55 39 5 9.55 434	$0.44\ 605\ 0.44\ 566$	9.97 381 9.97 376	18 17
44	9.52 846	9.55 474	0.44 526	9.97 372	16
45	9.52 881	9.55 514	0.44 486	9.97 367	15
46	$9.52 \ 916$	9.55 554	0.44 446	9.97 363	14
47	9.52 951	9.55 593	0.44 407	9.97 358	13 12
48 49	9.52986 9.53021	9.55 633 9.55 673	$0.44\ 367\ 0.44\ 327$	9.97 353 9.97 349	11
50	9.53 056	$\frac{9.55\ 613}{9.55\ 712}$	0.44 288	9.97 344	10
51	9.53 092	$\frac{9.55712}{9.55752}$	0.44 248	9.97 340	9
52	9.53 126	9.55 791	0.44 248	9.97 335	
53	9.53 161	9.55 831	0.44 169	9.97 331	7
54	9.53 196	9.55 870	0.44 130	9.97 326	8 7 6 5
55 56	9.53 23 1 9.53 266	9.55 910	0.44 090	9.97 322	5
50 57	9.53 200	9.55 949 9.55 989	$0.44\ 051$ $0.44\ 011$	9.97 317 9.97 312	4 3
58	9,53 336	9.56 028	0.43 972	9.97 308	$\frac{3}{2}$
59	9.53 370	9.56 067	0.43 933	9.97 303	1
60	9.53 405	9.56 107	0.43 893	9.97 299	0
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	,

		~	0		
,	L. Sin.	L. Tan.	L. Cot.	L. Cos.	
0	9.53 405	9.56 107	0.43 893	9.97 299	60
1	9.53 440	9,56 146	0.43 854	9.97 294	59
2	9.53 475	9,56 185	0.43 815	$9.97\ 289$	58
3	9,53 509	9.56 224	0.43 776	9.97 285	57
5	9.53 544 9.53 578	9,56 264 9,56 303	0.43 736 0.43 697	9.97 280 9.97 276	56 55
6	9,53 613	9.56 342	0.43 658	$9.97 \ \overline{271}$	54
7	9.53 647	9.56 381	0.43 619	9.97 266	53
8	9.53 682	9,56 420	0.43580	9.97 262	52
9	9.53 716	9.56 459	0.43 541	9.97 257	51
10	9.53 751	9,56 498	0.43 502	9.97 252	50
11	9.53 785	9.56 537	0,43 463	9.97 248	49
12 13	9,53 819 9,53 854	9.56 576 9.56 615	$0.43\ 424$ $0.43\ 385$	9.97 243 9.97 238	48 47
14	9,53 888	9.56 654	0.43 346	9.97 234	46
15	9.53 922	9.56 693	0.43 307	9.97 229	45
16	9.53 957	9.56 732	0.43 268	9.97 224	44
17	9.53 991	9.56 771	0.43 229	9.97 220	43
18	9.54 025 9.54 059	9.56 810	0.43 190	9.97 215 9.97 210	42
19 20	9.54 093	9,56 849	0.43 151	9.97 210	41 40
21	9.54 127	9.56 926	0.43 113	9.97 200	39
21 22	9.54 127	9,56 926	0.43 035	9.97 196	38
23	9.54 195	9.57 004	0.42 996	9.97 192	37
24	9.54 229	9.57 042	0.42 958	9.97 187	36
25	9.54 263	9.57 081	0.42 919	$9.97\ 182$	35
26	9.54 297	9.57 120	0.42 880	9.97 178	34
$\frac{27}{28}$	9.54 331 9.54 365	9.57 158 9.57 197	$0.42842 \\ 0.42803$	9.97 173 9.97 168	33 32
29	9.54 399	9.57 235	$0.42\ 765$	9.97 163	31
30	9.54 433	9.57 274	0.42 726	9.97 159	30
31	9.54 466	9.57 312	0.42 688	9.97 154	29
32	9.54500	9.57 351	0.42 649	9.97 149	28
33	9.54 534	9.57 389	0.42 611	9.97 145	27
34 35	9.54 567 9.54 601	9.57 428 9.57 466	$0.42\ 572$ $0.42\ 534$	9.97 140 9.97 135	$\frac{26}{25}$
36	$9.54\ 63\overline{5}$	9.57 504	0.42 496	9.97 130	24
37	9.54 668	9.57 543	0.42 457	9.97 126	23
- 38	9.54 702	9.57 581	0.42 419	9.97 121	22
39	9.54 735	9.57 619	0.42 381	9.97 116	21
40	9.54 769	9.57 658	0.42 342	9.97 111	20
41	9.54 802	9.57 696	0.42 304	9.97 107	19
42 43	9,54 836 9,54 869	9.57 734 9.57 772	$\begin{array}{c c} 0.42 \ 266 \\ 0.42 \ 228 \end{array}$	9.97 102 9.97 097	18 17
4.5	9.54 903	9.57 810	0.42 228	9.97 092	16
45	9.54 936	9.57 849	0.42 151	9.97 087	15
46	9.54 969	9.57 887	0.42 113	9.97 083	14
47	9.55 003	9.57 925	0.42 075	9.97 078	13
48	9,55 036 9,55 069	9.57 963 9.58 001	$0.42\ 037$ $0.41\ 999$	9.97 073 9.97 068	12 11
50	$\frac{9.55}{9.55} \frac{009}{102}$	9,58 001	0.41 961	9.97 063	10
51	9.55 136	9.58 077	0.41 923	$-\frac{9.97}{9.97}\frac{000}{059}$	9
52	9.55 169	9.58 115	0.41 885	9.97 054	8
53	9.55/202	9,58 153	0.41 847	9,97 049	7
54	9.55 235	9.58 191	0.41 809	9.97 044	6
55 56	9.55 268	9.58 229	0.41 771	9.97 039 9.97 035	5
56 57	9,55 301 9,55 334	9.58 267 9.58 304	0.41 733 0.41 696	9.97 030	4 3
58	9,55 367	9.58 342	0.41 658	9.97 025	1
59	9,55 400	9.58.380	$0.41\ 620$	9.97 020	
60	9.55 433	9.58 418	0.41 582	9.97 015	0
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	,
			00		_

,	L. Sin.	L. Tan.	L. Cot.	L. Cos.	
0	9.55 433	9.58 418	0.41 582	9.97 015	60
1	9.55 466	9.58 455	0.41 545	9.97 010	59
2	9.55 499	9.58 493	0.41 507	9.97 005	58
2 3	9.55 532	9,58 531	0.41 469	9.97 001	57
4	9,55 564	9.58 569	0.41 431	9.96 996	56
5 6	9.55 597 9.55 630	9.58 606 9.58 644	$0.41\ 394 \ 0.41\ 356$	9.96 991 9.96 986	55 54
7	9,55 663	9.58 681	0.41 319	9.96 981	53
- 8	9,55 695	9.58 719	0.41 281	9.96 976	52
9	9.55 728	9.58 757	0.41 243	9.96 971	51
10	9.55 761	9.58 794	0.41 206	9,96 966	50
11	9.55 793	9.58 832	0.41 168	9.96 962	49
12 13	9,55 826 9,55 858	9.58 869 9.58 907	0.41 131 0.41 093	9.96 957 9.96 952	48 47
14	9.55 891	9.58 944	0.41 056	9.96 947	46
15	9.55 923	9.58 981	$0.41\ 019$	9.96 942	45
16	9.55 956	9.59 019	0.40 981	9.96 937	44
17 18	9.55 988 9.56 021	9.59 056 9.59 094	0.40 944 0.40 906	9.96 932 9.96 927	43 42
19	9.56 053	9.59 131	0.40 869	9.96 922	41
20	9.56 085	9.59 168	0.40 832	9.96 917	40
21	9.56 118	9.59 205	0.40 795	9.96 912	39
22	9.56 150	9.59243	0.40 757	9.96 907	38
23	9.56 182	9.59 280	0.40 720	9.96 903	37
$\frac{24}{25}$	9.56 215 9.56 247	9.59 317 9.59 354	0.40 683 0.40 646	9.96 898 9.96 893	36 35
$\frac{25}{26}$	9.56 279	9.59 391	0.40 609	9.96 888	34
27	9,56 311	9.59 429	0.40 571	9.96 883	33
28	9.56 343	9.59 466	0.40 534	9.96 878	32
29	9.56 375	9.59 503	0.40 497	9.96 873	31
30	9.56 408	9.59 540	0.40 460	9.96 868	30
31 32	9.56 440 9.56 472	9.59 577 9.59 614	0.40 423 0.40 386	9.96 ['] 863 9.96 858	29 28
33	9.56 504	9.59 651	0.40 349	9.96 853	27
34	9.56 536	9.59 688	0.40 312	9.96 848	26
35	9.56 568	9.59 725	0.40 275	9.96 843	25
36 37	9.56 599 9.56 631	9.59 762 9.59 799	0.40 238 0.40 201	9.96 838 9.96 833	$\frac{24}{23}$
38	9.56 663	9.59 835	0.40 165	9.96 828	22
39	9.56 695	9.59 872	0.40 128	9.96 823	21
40	9.56 727	9.59 909	0.40 091	9.96 818	20
41	9.56759	9.59 946	0.40 054	9.96 813	19
42	9.56 790	9.59 983 9.60 019	$\begin{bmatrix} 0.40\ 017 \\ 0.39\ 981 \end{bmatrix}$	9.96 808 9.96 803	18
43 44	9.56822 9.56854	9.60 019	0.39 981 0.39 944	9.96 803	17 16
45	9.56 886	9,60 093	0.39 907	9.96 793	15
46	9.56 917	9.60 130	0.39 870	9.96 788	14
47 48	9.56 949 9.56 980	9.60 166 9.60 203	$0.39834 \\ 0.39797$	9.96 783 9.96 778	13 12
48	9.56 980 9.57 012	9.60 203	0.39 797	9.96 772	112
50	9.57 044	$\frac{-9.60\ 276}{9.60\ 276}$	0.39 724	9.96 767	10
51	9,57 075	9.60 313	0.39 687	9,96 762	9
52	9,57 107	9.60 349	0.39 651	9.96 757	8 7
53	9.57 138	9.60 386	0.39 614	9.96 752	7
54 55	9.57 169 9.57 201	9.60 422 9.60 459	$0.39\ 578$ $0.39\ 541$	9.96 747 9.96 742	6 5
56	$9.57 \ 232$	9.60 495	0.39 505	9.96 737	4
57	9.57 264	$9.60\ 532$	0.39 468	9.96732	3
58	9.57 295	9.60 568	0.39 432	9.96 727	4 3 2 1
59 60	9.57 326 9.57 358	9.60 605	0.39 395	9.96 722 9.96 717	0
	L. Cos.			L. Sin.	,
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	

66					
,	L. Sin.	L. Tan.	L. Cot.	L. Cos.	
0	9.57 358	9.60 641	0.39 359	9.96 717	60
1	9.57 389	9.60 677	0.39 323	9.96 711	59
2	9.57420	9.60 714	0.39 286	9.96 706	58
3	9.57 451	9.60 750 9.60 786	$0.39\ 250$ $0.39\ 214$	9.96 701	57
5	9.57 482 9.57 514	9.60 823	0.39 177	9.96 696 9.96 691	56 55
6	9.57 545	9.60 859	0.39 141	9.96 686	54
7	9.57 576	9.60 895	0.39 105	9.96 681	53
8	9.57 607	9.60 931	0.39 069	9.96 676	52
9	9.57 638	9.60 967	0.39 033	9.96 670	51
10	9.57 669	9.61 004	0.38 996	9.96 665	50
11	9.57 700	9.61 040	0.38 960	9.96 660	49
12 13	9.57 731 9.57 762	9.61 076 9.61 112	0.38 924 0.38 888	9,96 655 9,96 650	48
14	9.57 793	9.61 112	0.38 852	9.96 645	46
15	9.57 824	9.61 184	0.38 816	9.96 640	45
16	$9.57 85\overline{5}$	9.61 220	0.38 780	9.96 634	44
17	9.57 885	9.61 256	0.38 744	9.96 629	43
18	9.57 916	9.61 292	0.38 708	9.96 624	42
19	9.57 947	9.61 328	0.38 672	9.96 619	41
20	9.57 978	9.61 364	0.38 636	9.96 614	40
$\frac{21}{22}$	9.58 008 9.58 039	9.61 400 9.61 436	$0.38\ 600$ $0.38\ 564$	9.96 608 9.96 603	39 38
23	9.58 070	9.61 472	0.38 528	9.96 598	37
24	9.58 101	9.61 508	0.38 492	9.96 593	36
25	9.58 131	9.61 544	0.38 456	9.96 588	35
26	$9.58\ 162$	9.61 579	0.38 421	9.96 582	34
27 28	9.58 192 9.58 223	9.61 615	0.38 385	9.96 577	33 32
29	9.58 253	9.61 651 9.61 687	$0.38\ 349 \\ 0.38\ 313$	9.96 572 9.96 567	31
30	9.58 284	9.61 722	0.38 278	9,96 562	30
31	9.58 314	9.61 758	0.38 242	9.96.556	29
32	9.58 345	9.61 794	0.38 206	9.96 551	28
33	9.58 375	9.61 830	0.38 170	9.96 546	27
34	9.58 406	9.61 865	0.38 135	9.96 541	26
35	9.58 436	9.61 901	0.38 099	9.96 535	25
36 37	9.58 467 9.58 497	9.61 936 9.61 972	$0.38\ 064$ $0.38\ 028$	9.96 530 9.96 525	24 23
38	9.58 527	9.62 008	0.37 992	9.96 520	22
39	9.58 557	9.62 043	0.37 957	9.96 514	21
40	9.58 588	9.62 079	0.37 921	9.96 509	20
41	9.58 618	9.62 114	0.37 886	9.96 504	19
42	9.58 648	$9.62\ 150$	0.37 850	9.96 498	18
43	9.58 678	9.62 185	0.37 815	9.96 493	17
44	9.58 709 9.58 739	9.62 221 9.62 256	0.37 779 0.37 744	9.96 488 9.96 483	16 15
46	9.58 769	9.62 292	0.37 708	9.96 477	14
47	9.58 799	9.62 327	0.37 673	9.96 472	13
48	9.58 829	$9.62\ 362$	0.37 638	9.96 467	12
49	9.58 859	9.62 398	0.37 602	9.96 461	11
50	9.58 889	9.62 433	0.37 567	9.96 456	10
51	9.58 919	9.62 468	0.37 532	9.96 451	9
52	9.58 949	9.62 504	0.37 496	9.96 445	8
53 54	9.58 979 9.59 009	9.62 539 9.62 574	$0.37\ 461$ $0.37\ 426$	9.96 440 9.96 435	7
55	9.59 039	9.62 609	0.37 426	9.96 429	5
56	9,59 069	9.62 645	$0.37\ 355$	9.96 424	4
57	9.59 098	$9.62\ 680$	$0.37\ 320$	9.96 419	3
58	9.59 128	9.62 715	0.37 285	9.96 413	2 1
59 60	9.59 158	9.62 750	0.37 250	9.96 408	0
-00	9.59 188	9.62 785	0.37 215	9,96 403	,
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	,

0	9.59 188	L. Tan.	L. Cot.	L. Cos.	
1	9.99 100			0.00.409	60
	() W() () ()	9.62 785	0.37 215	9.96 403	60
	9.59 218 9.59 247	9.62 820 9.62 855	$\begin{array}{c} 0.37 \ 180 \\ 0.37 \ 14\overline{5} \end{array}$	9.96 397 9.96 392	59 58
$\frac{2}{3}$	9.59 247	9.62 890	0.37 110	9.96 387	57
4	9.59 307	9.62 926	0.37 074	9.96 381	56
5	9.59 336	9.62 961	0.37 039	9.96 376	55
6	9.59 366	9.62 996	0.37004	$9.96.37\underline{0}$	54
7	9.59 396	9.63 031	0.36 969	9.96 365	53
8	$9.59\ 425$ $9.59\ 455$	9.63 066 9.63 101	0.36 934 0.36 899	9.96 360 9.96 354	52
9 10	9.59 484	9.63 135	0.36 865	9.96 349	51 50
	9.59 514	9.63 170	0.36 830	9.96 343	49
11 12	9.59 543	9.63 205	0.36 795	9.96 338	48
13	9.59 573	9.63 240	0.36 760	9,96 333	47
14	9.59 602	9.63 275	0.36 725	9.96 327	46
15	9.59632	9.63 310	0,36 690	$9.96\ 322$	45
16	$9.59\ 661$	9,63 345	$0.36\ 655$	9.96 316	44
17	9.59 690	9.63 379	$0.36\ 621$	9.96 311	43
18	9.59 720	9.63 414	0.36 586	9.96 305	42
19	9.59 749	9.63 449	0.36 551	9.96 300	41
20	9.59 778	9.63 484	$0.36\ 516$	9.96 294	40
21	9.59 808	9.63 519	0.36 481	9.96289	39
22	9.59 837	9.63 553	0.36 447	9.96 284	38
23	9.59 866	9.63 588	0.36 412	9.96 278	37
$\frac{24}{25}$	9.59 895	9.63 623	0.36 377	9.96 273 9.96 267	36 35
$\frac{25}{26}$	9.59 924 9.59 954	9.63 657 9.63 692	$0.36\ 343$ $0.36\ 308$	9.96 262	34
27	9.59 983	9.63 726	0.36 274	9.96 256	33
$\tilde{28}$	9.60 012	9.63 761	0.36 239	9.96 251	32
$\tilde{29}$	9.60 041	9.63 796	0.36 204	9.96 245	31
30	9.60 070	9.63 830	0.36 170	9.96 240	30
31	9.60 099	9.63 865	0.36 135	9.96 234	29
32	9.60 128	9.63 899	0.36 101	9.96 229	28
33	9.60 157	9.63 934	0.36066	$9.96\ 223$	27
34	9.60 186	9.63 968	0.36032	$9.96\ 218$	26
35	9.60 215	9.64 003	0.35997	$9.96\ 212$	25
36	9.60 244	9.64 037	0.35 963	9.96 207	24
37	9.60 273	9.64 072	0.35 928	9.96 201	23
38 39	9.60 302 9.60 331	9.64 106 9.64 140	0.35 894 0.35 860	9.96 196 9.96 190	$\frac{22}{21}$
40	9.60 359	9.64 175	0.35 825	9.96 185	20
41	9.60 388	9.64 209	0.35 791	9.96 179	19
42	9.60 417	9.64 243	0.35 757	9.96 174	18
43	9.60 446	9.64 278	0.35722	9.96 168	17
44	9.60 474	9.64 312	0.35 688	9.96 162	16
45	9.60 503	9.64 346	0.35 654	9.96 157	15
46	$9.60\ 532$	9.64 381	0.35 619	$9.96\ 151$	14
47	9.60 561	$9.64 \ 41\overline{5}$	0.35 585	9.96 146	13
48	9.60 589	9.64 449	0.35 551	9.96 140	12
49	9.60 618	9.64 483	0.35 517	9.96 135	11
50	9.60 646	9.64 517	0.35 483	9.96 129	10
51 50	9.60 675	9.64 552	0.35 448	9.96 123	9
52 53	9.60 704 9.60 732	9.64 586 9.64 620	$0.35\ 414$ $0.35\ 380$	9.96 118 9.96 112	8
54	9.60 761	9.64654	0.35 346	9.96 107	6
55	9.60 789	9,64 688	0.35 312	9.96 101	5
56	9.60 818	9.64 722	0.35 278	9.96 095	4
57	9.60 846	- 9.64 756	0.35 244	9.96 090	4 3 2
58	9.60.875	9.64 790	$0.35\ 210$	9.96 084	
59	9.60 903	9.64 824	0.35 176_	9.96 079	1
60	9.60 931	9.64 858	0.35 142	9.96 073	0
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	·

24						
/	L. Sin.	L. Tan.	L. Cot.	L. Cos.		
0	9.60 931	9.64 858	0.35 142	9.96 073	60	
1	9.60 960	9.64 892	0.35 108	9.96 067	59	
$\frac{2}{3}$	9,60 988 9,61 016	9.64 926 9.64 960	0.35 074 0.35 040	9.96 062 9.96 056	58	
4	9.61 045	9.64 994	0.35 006	9.96 050	57 56	
5	9.61 073	$9.65 \ 028$	0.34 972	9.96 045	55	
6	9.61 101	9.65 062	0.34 938	9.96 039	54	
7 8	9.61 129 9.61 158	9.65 096 9.65 130	0.34 904 0.34 870	9,96 034 9,96 028	53 52	
9	9.61 186	9.65 164	0.34 836	9.96 022	51	
10	9.61 214	9.65 197	0.34 803	9.96 017	50	
11	9.61 242	9.65 231	0.34 769	9.96 011	49	
12	9.61 270	9.65 265	0.34 735	9.96 005	48	
13	9.61 298	9.65 299	0.34 701	9.96 000	47	
14 15	9.61 326 9.61 354	9.65 333 9.65 366	0.34 667 0.34 634	9.95 994 9.95 988	46 45	
16	9.61 382	9.65 400	0.34 600	9.95 982	44	
17	9.61 411	9.65 434	0.34 566	9.95 977	43	
18	9.61 438	9.65 467	0.34 533	9.95 971	42	
19	9.61 466	9.65 501	0.34 499	9.95 965	41	
20	9.61 494	9.65 535	0.34 465	9.95 960	40	
21 22	9.61 522 9.61 550	9.65 568 9.65 602	0.34 432 0.34 398	9.95 954 9.95 948	39 38	
23	9.61 578	9.65 636	0.34 364	9.95 942	37	
24	9.61 606	$9.65\ 669$	0.34 331	9.95 937	36	
25	9.61 634	9.65 703	0.34 297	9.95 931	35	
$\frac{26}{27}$	9.61-662 9.61-689	9.65 736 9.65 770	0.34 264 0.34 230	9.95 925 9.95 920	3 <u>4</u> 33	
28	9.61 717	9,65 803	0.34 197	9.95 914	32	
29	9.61 745	9.65 837	0.34 163	9.95 908	31	
30	9.61 773	9.65 870	0.34 130	9.95 902	30	
31	9.61 800	9.65 904	0.34 096	9.95 897	29	
32	9.61 828 9.61 856	9.65 937	0.34 063 0.34 029	9.95 891 9.95 885	28	
34	9.61 883	9.65 971 9.66 004	0.33 996	9.95 879	27 26	
35	9.61 911	9.66 038	0.33962	9.95 873	25	
36	9.61 939	9,66 071	0.33 929	9.95 868	24	
37 38	9.61 966 9.61 994	9.66 104 9.66 138	$0.33896 \\ 0.33862$	9.95 862 9.95 856	23 22	
39	9.62 021	9.66 171	0.33 829	9.95 850	21	
40	9.62 049	9.66 204	0.33 796	9.95 844	20	
41	9.62 076	9.66 238	0.33 762	9.95 839	19	
42	9.62 104	$9.66\ 271$	0.33 729	9.95 833	18	
43 44	9.62 131 9.62 159	9,66 304	0.33 696 0.33 663	9.95 827 9.95 821	17	
45	$9.62\ 159$ $9.62\ 186$	9.66 337 9.66 371	0.33 629	9.35 821 9.95 815	16 15	
46	$9.62\ 214$	9.66 404	0.33 596	9.95 810	14	
47	9.62 241	9.66 437	0.33 563	9.95 804	13	
48 49	9.62 268 9.62 296	9.66 470 9.66 503	0.33 530 0.33 497	9.95 798 9.95 792	12	
50	9.62 323	9.66 537	0.33 463	9.95 786	11 10	
51	9.62 350	9.66 570	0.33 430	9.95 780	9	
52	9.62 377	9.66 603	0.33 397	9.95 775	8	
53	9.62 405	9.66 636	0.33 364	9.95 769	7	
54	9.62 432	9.66 669	0.33 331	9.95 763	- 6	
55 56	9.62 459 9.62 486	9.66 702 9.66 735	0.33 208 0.33 265	9.95 757 9.95 751	5	
57	9.62 513	9.66 735 9.66 768	0.33 232	9.95 745	3	
58	9.62 541	9.66 801	0.33 199	9.95 739	2	
59	9.62.568	9,66 834	0,33 166	9.95 733	1	
60	9.62 595	9.66 867	0.33 133	9.95 728	0	
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	,	

		~		1 0 1	
	L. Sin.	L. Tan.	L. Cot.	L. Cos.	
0	9.62 595	9.66 867	0.33 133	9.95728	60
1	9.62 622	9,66 900	0.33 100	9.95722	59
2	9.62 649	9.66 933	0.33 067	9.95 716 9.95 710	58
$\frac{3}{4}$	9,62 676 9,62 703	9,66 966 9,66 999	$0.33\ 034 \ 0.33\ 001$	9.95 710	57 56
5	9.62 730	9.67 032	0.32 968	9.95 698	55
6	9.62 757	$9.67 \cdot 065$	0.32 935	9,95 692	54
7	9.62 784	9.67-098	0.32902	$9.95\ 686$	53
8	9.62 811	9.67 131	0.32 869	9.95 680	52
9	9.62 838	9.67 163	0.32 837	9.95 674	51
10	9.62 865	9,67 196	0.32 804	9.95 668	50
11 12	9.62 892 9.62 918	9.67 229 9.67 262	$0.32\ 771 \ 0.32\ 738$	9.95 663 9.95 657	49 48
13	9.62 945	$9.67 \ 202$ $9.67 \ 295$	0.32 705	9.95 651	47
14	9.62 972	9.67 327	0.32 673	$9.95 64\overline{5}$	46
15	9.62 999	9.67 360	0.32 640	9.95639	45
16	9.63 026	9.67 393	0.32 607	9.95 633	44
17	9,63 052	9.67 426	0.32 574	9.95 627	$\frac{43}{42}$
18 19	9.63 079 9.63 106	9.67 458 9.67 491	0.32 542 0.32 509	9.95621 $9.9561\overline{5}$	41
20	9.63 133	9.67 524	0.32 476	9.95 609	40
21	9.63 159	9.67 556	0.32 444	9.95 603	39
$\frac{21}{22}$	9.63 186	9.67 589	0.32 414	9.95 597	38
23	9.63 213	9.67 622	0.32 378	9.95 591	37
24	9,63 239	9.67 654	0.32 346	$9.95\ 585$	36
25	9.63 266	9.67 687	0.32 313	9.95 579	35
$\frac{26}{27}$	9.63 292 9.63 319	9.67 719 $9.67 752$	$0.32\ 281 \ 0.32\ 248$	9.95 573	34 33
28	9,63 345	9.67 752 $9.67 785$	0.32 248	9.95 567 9.95 561	$\frac{33}{32}$
$\frac{20}{29}$	9.63 372	9.67 817	0.32 183	$9.95\ 55\overline{5}$	31
30	9.63 398	9.67 850	0.32 150	9.95 549	30
31	9.63 425	9.67 882	0.32 118	9.95 543	29
32	9.63 451	$9.67 91\overline{5}$	$0.32\ 085$	$9.95\ 537$	28
33	9.63 478	9.67 947	0.32 053	$9.95\ 531$	27
34	9.63 504	9.67 980	0.32 020	9.95 525	$\frac{26}{25}$
35 36	9.63 531 9.63 557	9.68 012 9.68 044	0.31 988 0.31 956	9.95 519 9.95 513	$\frac{25}{24}$
37	9.63 583	9.68 077	0.31 923	9.95 507	23
38	9.63 610	9.68 109	0.31 891	9.95 500	22
39	9.63 636	9.68 142	0.31 858	9.95 494	21
40	9.63 662	9.68 174	0.31 826	9.95 488	20
41	9.63 689	9.68 206	0.31 794	9.95482	19
42 43	9.63 715 9.63 741	9.68 239 9.68 271	0.31 761 0.31 729	9.95 476 9.95 470	18 17
43	9.63 741	9.68 271	0.31 729	9.95 470	16
45	9.63 794	9.68 336	0.31 664	9.95 458	15
46	9.63 820	9.68 368	$0.31\ 632$	$9.95\ 452$	14
47	9.63 846	9.68 400	0.31 600	9.95 446	13
48 49	9.63 872 9.63 898	9.68 432	$0.31\ 568 \ 0.31\ 535$	9.95 440 9.95 434	12 11
50		9.68 465	0.31 503	9.95 434	10
	9.63 924	9.68 497			9
51 52	9.63 950 9.63 976	9.68 529 9.68 561	$\begin{array}{c c} 0.31 \ 471 \\ 0.31 \ 439 \end{array}$	9.95 421 9.95 415	8
53	9.64 002	9.68 593	0.31 407	9.95 409	ř
54	9.64028	9.68 626	0.31 374	9.95 403	7 6
55	9.64 054	9.68 658	0.31 342	9.95 397	5
56	9.64 080	9.68 690	0.31 310	9,95 391	3
57 58	9.64 106 9.64 132	9.68 722 9.68 754	$0.31\ 278 \ 0.31\ 246$	$9.95\ 384$ $9.95\ 378$	$\frac{3}{2}$
59	9.64 158	9.68 786	0.31 214	9.95 372	ĩ
60	9.64 184	9.68 818	0.31 182	9.95 366	0
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	,

,	I Cin	(A)		1 0	-
	L. Sin.	L. Tan.	L. Cot.	L. Cos.	
0	9.64 184	9.68 818	0.31 182	9.95 366	60
1	9.64 210	9.68 850	0.31 150	9.95 360	59
3	9.64 236 9.64 262	9.68 882 9.68 914	$0.31\ 118 \\ 0.31\ 086$	9.95 354 9.95 348	58 57
4	9.64 288	9.68 946	0.31 054	9.95 341	56
5	9.64 313	9.68 978	0.31 022	9.95 335	55
- 6	9.64 339	9.69 010	0.30 990	9.95 329	54
7	9.61 365	9.69 042	0.30958	$9.95\ 323$	53
8	9.64 391	9.69 074	0.30 926	9.95 317	52
9	9.64 417	9.69 106	0.30 894	9.95 310	51
10	9.64 442	9.69 138	0.30 862	9.95 304	50
11	9.64 468	9.69 170	0.30 830	9.95 298	49
12 13	9.64 494 9.64 519	9.69 202 9.69 234	0.30 798 0.30 766	9.95 292 9.95 286	48 47
14	9.64 545	9.69 266	0.30 734	9.95 279	46
15	9.64 571	9.69 298	0.30 702	9.95 273	45
16	9.64596	9,69 329	0.30 671	$9.95\ 267$	44
17	9.64 622	9.69 361	0.30 639	$9.95\ 261$	43
18	9.64 647	9.69 393	0.30 607	9.95 254	42
19	9.64 673	9.69 425	0.30 575	9.95 248	41
20	9.64 698	9.69 457	0.30 543	9.95 242	40
21	9.64 724	9.69 488	0.30 512	9.95 236	39
22 23	9.64749 9.64775	9.69 520 9.69 552	0.30 480 0.30 448	9.95 229 9.95 223	38 37
24	9.64 800	9.69 584	0.30 416	9.95 217	36
25	9.64 826	9.69 615	0.30 385	9.95 211	35
26	9.64 851	9.69 647	$0.30\ 353$	9.95 204	34
27	9.64 877	9.69 679	$0.30\ 321$	$9.95\ 198$	33
28	9.64 902	9.69 710	0.30 290	9.95 192	32
29	9.64 927	9.69 742	0.30 258	9.95 185	31
30	9.64 953	9.69 774	0.30 226	9.95 179	30
31	9.64 978	9.69 805	0.30 195	9.95 173	29
32 33	9.65 003 9.65 029	9.69 837 9.69 868	0.30 163 0.30 132	9.95 167 9.95 160	28 27
34	9,65 054	9,69 900	0.30 100	9.95 154	26
35	9.65 079	9.69 932	0.30 068	9.95 148	25
36	9.65 104	9.69 963	0.30 037	9.95 141	24
37	$9.65\ 130$	9.69 995	0.30 005	9.95 135	23
38	9.65 155	9.70 026	0.29 974	9.95 129	22
39	9.65 180	9.70 058	0.29 942	9.95 122	21
40	9.65 205	9.70 089	0.29 911	9.95 116	20
41	9.65 230	9.70 121	0.29 879	9.95 110	19
42	9.65 255 9.65 281	9.70 152 9.70 184	0.29 848 0.29 816	9.95 103 9.95 097	18 17
44	9.65 306	9.70 215	0.29 785	9.95 090	16
45	9.65 331	9.70 247	0.29753	9.95 084	15
46	$9.65 \ 356$	9.70 278	0.29722	9.95 078	14
47	9.65 381	9.70 309	0.29 691	9.95 071	13
48	9.65 406 9.65 431	9.70 341 9.70 372	$0.29659 \\ 0.29628$	9.95 065 9.95 059	12 11
49					
50	9.65 456	9.70 404	0.29 596	9.95 052	10
51	9.65 481	9.70 435 9.70 466	$0.29\ 565$ $0.29\ 534$	9,95 046 9,95 039	9 8
52 53	9,65 506 9,65 531	9.70 400	0.29 502	9,95 033	7
54	9.65 556	9.70 529	0.29 471	9.95 027	6
55	9.65 580	9.70 560	0.29 440	9.95 020	5
56	9,65 605	9.70592	0.29 408	9.95 014	4
57	9,65 630	9.70 623	0.29 377	9,95 007	3
58 59	9,65 655 9,65 680	9.70 654	0.29346 0.29315	9,95 001 9,94 995	2 1
60	9.65 705	9.70 685	0.29 283	9.94 988	0
- 00		9.70 717			
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	,

,	L. Sin.	L. Tan.	L. Cot.	L. Cos.	
0	9.65 705	9.70 717	0.29 283	9.94 988	60
1	9.65 729	9.70 748	0.29 252	9.94 982	59
2	9.65754	9.70 779	$0.29\ 221$	9.94 975	58
3	9.65 779	9.70 810	0.29 190	9.94 969	57
4 5	9.65 804 9.65 828	9.70 841 9.70 873	$0.29\ 159\ 0.29\ 127$	9.94 962 = 9.94 956	56 55
6	9.65 853	9.70 904	0.29 096	9.94 949	54
7	9.65878	$9.70 \ 93\overline{5}$	$0.29\ 065$	9.94 943	53
8	9,65 902	9.70 966	0.29 034	9.94 936	52
9	9.65 927	9.70 997	0.29 003	9.94 930	51
10	9.65 952	9.71 028	0.28 972	9.94 923	50
11 12	9.65 976 9.66 001	9.71 059 9.71 090	$0.28941 \\ 0.28910$	9.94 917	49 48
13	9.66 025	9.71 121	0.28 879	9.94 904	47
14	$9.66\ 050$	9.71 153	0.28 847	9.94898	46
15	9.66 075	9.71 184	0.28 816	9.94 891	45
16	9.66 099 9.66 124	$9.71\ 215$ $9.71\ 246$	$0.28\ 785 \ 0.28\ 754$	9.94885 9.94878	$\frac{44}{43}$
17 18	9.66 148	9.71 277	0.28 723	9.94 871	42
19	9.66 173	9.71 308	$0.28\ 692$	9.94~865	41
20	9.66 197	9.71 339	0.28 661	9.94 858	40
21	9.66 221	9.71 370	0.28 630	9.94 852	39
22	9.66 246	9.71 401	0.28 599	9.94 845	38
23	$9.66\ 270$ $9.66\ 295$	$9.71\ 431\ 9.71\ 462$	0.28 569 0.28 538	9.94 839 9.94 832	37 36
$\frac{24}{25}$	9.66 319	9.71402 9.71493	$0.28\ 507$	9.94 826	- 35
26	9.66 343	9.71 524	0.28 476	9.94 819	34
27	9.66 368	9.71 555	$0.28\ 445$	$9.94\ 813$	33
28	9.66 392	9.71 586	0.28 414	9.94 806	32
29	9.66 416	$\frac{9.71 \ 617}{9.71 \ 648}$	$\begin{array}{c c} 0.28 & 383 \\ \hline 0.28 & 352 \end{array}$	9.94 799	31 30
30	9.66 465		$\frac{0.28\ 332}{0.28\ 321}$	$\frac{9.94786}{9.94786}$	
31 32	9.66 489	9.71 679 9.71 709	$0.28\ 291$	9.94 780	29 28
33	9.66 513	9.71 740	0.28 260	9.94773	27
34	9.66537	9.71 771	0.28 229	9.94767	26
35	9.66 562 9.66 586	9.71 802 9.71 833	$0.28\ 198 \ 0.28\ 167$	9.94 760 9.94 753	$\frac{25}{24}$
36 37	9.66 610	9.71 863	0.28 137	9.94 747	23
38	9.66 634	9.71 894	0.28 106	9.94 740	22
39	9.66 658	9.71 925	0.28 075	9,94 734	21
40	$9.66\ 682$	9.71 955	0.28 045	9.94 727	20
41	9.66 706	9.71 986	0.28 014	9.94 720	19
42 43	9.66731 9.66755	9.72 017 9.72 048	$\begin{array}{c c} 0.27 & 983 \\ 0.27 & 952 \end{array}$	9.94 714 9.94 707	18 17
43	9.66 779	9.72048 9.72078	0.27932 0.27922	9.94 700	16
45	9.66 803	9.72 109	0.27 891	9.94 694	15
46	9.66 827	9.72 140	0.27 860	9.94 687	14
47	9.66851 9.66875	$\begin{array}{c c} 9.72 \ 170 \\ 9.72 \ 201 \end{array}$	$0.27830 \\ 0.27799$	9.94 680 9.94 674	$\frac{13}{12}$
48 49	9.66 899	$9.72\ 201$ $9.72\ 231$	0.27 769	9.94 667	11
50	9.66 922	9.72 262	0.27 738	9.94 660	10
51	9.66 946	9.72 293	0.27 707	9.94 654	9
52	9.66 970	9.72 323	0.27 677	9.94 647	8
53	9.66 994	9.72 354	0.27 646	9.94 640	7
54 55	$9.67\ 018$ $9.67\ 042$	$9.72\ 384 \ 9.72\ 415$	$\begin{array}{c c} 0.27 \ 616 \\ 0.27 \ 585 \end{array}$	9.94 634 9.94 627	6 5
55 56	9.67 066	9.72 415	0.27 555	9.94 620	4
57	9.67 090	9.72 476	$0.27\ 524$	9.94 614	3
58	9.67 113	$9.72\ 506$	0.27 494	9.94 607	$\frac{2}{1}$
59 60	$\frac{9.67 \ 137}{9.67 \ 161}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{r} -0.27\ 463 \\ \hline 0.27\ 433 \end{array}$	9.94 600	0
- 00					
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	'

v L. Sin. L. Tan. L. Cot. L. Cos. 0 9.67 161 9.72 567 0.27 4032 9.94 588 50 1 9.67 185 9.72 588 0.27 372 9.94 580 58 3 9.67 286 9.72 689 0.27 372 9.94 580 58 3 9.67 286 9.72 680 0.27 311 9.94 560 55 4 9.67 286 9.72 780 0.27 250 9.94 560 55 5 9.67 327 9.72 780 0.27 250 9.94 546 53 7 9.67 327 9.72 871 0.27 189 9.94 546 53 8 9.67 330 9.72 811 0.27 189 9.94 546 53 9 9.67 374 9.72 811 0.27 198 9.94 546 53 10 9.67 374 9.72 811 0.27 198 9.94 546 53 11 9.67 342 9.72 902 0.27 108 9.94 546 50 11 9.67 421 9.72 903 0.27 007 9		40						
1 9.67 185 9.72 508 0.27 402 9.94 587 58 29.67 208 9.72 628 0.27 372 9.94 580 58 3 9.67 232 9.72 639 0.27 341 9.94 573 57 4 9.67 256 9.72 689 0.27 341 9.94 573 57 56 59.67 250 9.72 750 0.27 250 9.94 560 55 69.67 250 9.72 750 0.27 250 9.94 546 53 8 9.67 350 9.72 810 0.27 189 9.94 546 53 8 9.67 350 9.72 811 0.27 189 9.94 546 53 8 9.67 367 9.72 811 0.27 189 9.94 546 53 10 9.67 374 9.72 841 0.27 189 9.94 533 51 10 9.67 374 9.72 841 0.27 189 9.94 533 51 10 9.67 374 9.72 841 0.27 189 9.94 533 51 10 9.67 374 9.72 841 0.27 189 9.94 526 50 11 9.67 421 9.72 902 0.27 098 9.94 513 48 13 9.67 463 9.72 963 0.27 068 9.94 513 48 13 9.67 463 9.72 963 0.27 067 9.94 499 467 14 9.67 492 9.72 932 0.27 068 9.94 513 48 13 9.67 468 9.72 963 0.27 067 9.94 499 467 14 9.67 492 9.72 932 0.27 068 9.94 513 48 13 9.67 562 9.73 084 0.26 916 9.94 479 43 15 9.67 515 9.73 023 0.26 917 9.94 499 465 16 9.67 539 9.73 054 0.26 916 9.94 479 43 18 9.67 562 9.73 114 0.26 856 9.94 465 41 19 9.67 609 9.73 144 0.26 856 9.94 465 41 19 9.67 609 9.73 144 0.26 856 9.94 465 41 19 9.67 609 9.73 255 0.26 765 9.94 455 40 19 9.67 609 9.73 255 0.26 765 9.94 455 32 49 66 766 9.73 255 0.26 765 9.94 445 38 223 9.67 763 9.73 205 0.26 675 9.94 445 38 223 9.67 763 9.73 255 0.26 765 9.94 443 33 224 9.67 750 9.73 255 0.26 765 9.94 443 33 37 47 47 47 47 47 47 47 47 47 47 47 47 47	,	L. Sin.	L. Tan.	L. Cot.	L. Cos.			
2 9.67 208 9.72 628 0.27 372 9.94 580 58 3 9.67 232 9.72 659 0.27 341 9.94 573 57 56 59.67 250 9.72 689 0.27 311 9.94 573 57 57 9.67 250 9.72 680 0.27 250 9.94 560 55 59.67 250 9.72 720 0.27 250 9.94 560 55 59.67 260 9.72 720 0.27 250 9.94 553 54 7 9.67 327 9.72 780 0.27 250 9.94 546 53 8 9.67 350 9.72 811 0.27 189 9.94 533 51 10 9.67 374 9.72 841 0.27 189 9.94 533 51 10 9.67 374 9.72 841 0.27 189 9.94 533 51 10 9.67 374 9.72 841 0.27 189 9.94 533 51 10 9.67 374 9.72 872 0.27 128 9.94 526 50 11 9.67 421 9.72 902 0.27 908 9.94 513 49 12 9.67 445 9.72 902 0.27 908 9.94 513 49 12 9.67 445 9.72 903 0.27 037 9.94 506 47 14 9.67 422 9.72 903 0.27 037 9.94 506 47 14 9.67 422 9.72 903 0.27 037 9.94 499 46 15 9.67 515 9.73 023 0.26 976 9.94 499 46 15 9.67 515 9.73 023 0.26 976 9.94 499 46 15 9.67 550 9.73 054 0.26 946 9.94 485 41 17 9.67 562 9.73 054 0.26 946 9.94 485 41 19 9.67 660 9.73 144 0.26 886 9.94 472 42 19 9.67 630 9.73 175 0.26 825 9.94 479 43 18 9.67 566 9.73 114 0.26 886 9.94 472 42 19 9.67 630 9.73 255 0.26 765 9.94 451 39 9.67 630 9.73 255 0.26 765 9.94 451 39 9.67 630 9.73 255 0.26 765 9.94 451 39 9.67 680 9.73 255 0.26 765 9.94 451 39 9.67 680 9.73 255 0.26 765 9.94 441 35 22 9.67 726 9.73 395 0.26 765 9.94 441 35 22 9.67 726 9.73 395 0.26 765 9.94 441 35 22 9.67 726 9.73 395 0.26 765 9.94 441 35 22 9.67 726 9.73 395 0.26 765 9.94 441 35 22 9.67 726 9.73 395 0.26 765 9.94 441 33 28 9.67 820 9.73 416 0.26 534 9.94 390 30 30 31 9.67 806 9.73 577 0.26 433 9.94 383 29 9.67 800 9.73 357 0.26 433 9.94 380 22 9.67 786 9.73 376 0.26 433 9.94 390 30 30 31 9.67 806 9.73 577 0.26 433 9.94 380 29 9.67 800 9.73 357 0.26 433 9.94 380 29 9.67 800 9.73 357 0.26 433 9.94 380 29 9.67 800 9.73 577 0.26 433 9.94 380 29 9.67 800 9.73 577 0.26 433 9.94 300 30 30 31 9.67 806 9.73 677 0.26 433 9.94 300 30 31 9.67 806 9.73 677 0.26 433 9.94 300 30 31 9.67 806 9.73 677 0.26 433 9.94 300 30 31 9.67 806 9.73 677 0.26 833 9.94 325 21 9.68 814 9.73 887 0.26 613 9.94 300 30 31 9.68 805 9.73 677 0.26 833 9.94 325 21 9.68 814 9.73 877 0	0	9.67 161	9.72 567	0.27 433	9.94 593	60		
3 9.67 252 9.72 659 0.27 341 9.94 573 57 5 9.67 256 9.72 689 0.27 311 9.94 567 56 5 9.67 280 9.72 790 0.27 280 9.94 560 55 6 9.67 330 9.72 750 0.27 220 9.94 553 54 7 9.67 359 9.72 811 0.27 189 9.94 546 53 8 9.67 374 9.72 811 0.27 189 9.94 540 52 9 9.67 374 9.72 81 0.27 189 9.94 546 53 10 9.67 374 9.72 83 0.27 189 9.94 540 52 11 9.67 374 9.72 932 0.27 088 9.94 513 48 11 9.67 421 9.72 932 0.27 088 9.94 513 48 12 9.67 441 9.72 932 0.27 068 9.94 513 48 12 9.67 452 9.73 932 0.27 077 9.94 494 46 15 9.67 515 9.73 933 0.26					9.94 587	59		
4 9.67 256 9.72 780 0.27 311 9.94 560 56 5 9.67 280 9.72 720 0.27 250 9.94 560 55 7 9.67 303 9.72 750 0.27 250 9.94 533 54 8 9.67 350 9.72 811 0.27 189 9.94 546 53 8 9.67 374 9.72 811 0.27 189 9.94 540 52 9 9.67 374 9.72 811 0.27 189 9.94 543 51 10 9.67 374 9.72 811 0.27 198 9.94 513 51 10 9.67 374 9.72 982 0.27 198 9.94 513 49 11 9.67 4415 9.72 903 0.27 037 9.94 506 47 12 9.67 442 9.72 903 0.27 037 9.94 506 47 13 9.67 492 9.72 903 0.27 037 9.94 499 46 15 9.67 515 9.73 903 0.26 976 9.94 499 46 16 9.67 525 9.73 903	2	9.67 208						
5 9.67 380 9.72 750 0.27 280 9.94 568 55 6 9.67 303 9.72 750 0.27 250 9.94 546 53 8 9.67 350 9.72 811 0.27 189 9.94 540 52 8 9.67 350 9.72 811 0.27 198 9.94 533 51 10 9.67 398 9.72 872 0.27 198 9.94 526 50 11 9.67 445 9.72 902 0.27 088 9.94 513 48 13 9.67 468 9.72 963 0.27 067 9.94 506 47 14 9.67 468 9.72 963 0.27 067 9.94 506 47 14 9.67 468 9.72 963 0.27 067 9.94 409 46 15 9.67 515 9.67 515 9.73 084 0.26 916 9.94 485 44 17 9.67 523 9.73 084 0.26 916 9.94 485 44 17 9.67 633 9.73 175 0.26 825 9.94 475 42 20 9.67 633 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td></td<>								
6 9.07 303 9.72 750 0.27 250 9.94 536 54 8 9.67 350 9.72 811 0.27 159 9.94 546 52 9 9.07 374 9.72 811 0.27 159 9.94 546 52 11 9.67 398 9.72 872 0.27 128 9.94 533 51 10 9.07 398 9.72 872 0.27 128 9.94 533 51 12 9.67 421 9.72 902 0.27 068 9.94 519 49 12 9.67 445 9.72 902 0.27 068 9.94 513 48 13 9.67 468 9.72 963 0.27 077 9.94 596 47 14 9.67 492 9.72 963 0.27 077 9.94 499 46 15 9.67 515 9.73 023 0.26 977 9.94 492 45 15 9.67 515 9.73 023 0.26 977 9.94 499 46 17 9.67 562 9.73 084 0.26 916 9.94 479 43 18 9.67 586 9.73 114 0.26 886 9.94 479 43 18 9.67 586 9.73 114 0.26 886 9.94 472 42 19 9.67 609 9.73 144 0.26 886 9.94 465 41 20 9.67 630 9.73 255 0.26 765 9.94 465 41 22 9.67 630 9.73 255 0.26 765 9.94 451 39 20 9.67 633 9.73 205 0.26 765 9.94 455 41 22 9.67 680 9.73 255 0.26 765 9.94 455 32 22 9.67 680 9.73 255 0.26 765 9.94 451 39 22 9.67 680 9.73 255 0.26 765 9.94 451 39 22 9.67 680 9.73 255 0.26 765 9.94 451 39 22 9.67 680 9.73 255 0.26 765 9.94 453 32 22 9.67 726 9.73 295 0.26 765 9.94 431 36 22 9.67 726 9.73 295 0.26 765 9.94 431 36 25 9.67 726 9.73 295 0.26 765 9.94 431 36 25 9.67 726 9.73 295 0.26 765 9.94 431 36 25 9.67 726 9.73 295 0.26 765 9.94 431 36 25 9.67 726 9.73 295 0.26 765 9.94 431 36 25 9.67 726 9.73 295 0.26 765 9.94 431 36 25 9.67 726 9.73 295 0.26 765 9.94 431 36 25 9.67 726 9.73 295 0.26 765 9.94 431 36 25 9.67 726 9.73 295 0.26 765 9.94 431 36 25 9.67 726 9.73 295 0.26 765 9.94 431 36 25 9.67 786 9.73 375 0.26 674 9.94 494 32 29 9.67 843 9.73 376 0.26 644 9.94 417 34 27 9.67 820 9.73 366 0.26 644 9.94 417 34 27 9.67 820 9.73 366 0.26 644 9.94 417 34 29 9.67 809 9.73 567 0.26 403 9.94 397 31 30 9.67 806 9.73 567 0.26 403 9.94 397 31 30 9.67 806 9.73 567 0.26 403 9.94 397 31 30 9.67 806 9.73 567 0.26 403 9.94 397 31 30 9.67 806 9.73 567 0.26 403 9.94 397 31 30 9.68 806 9.73 687 0.26 633 9.94 396 22 66 9.67 9.68 806 9.73 687 0.26 633 9.94 396 22 66 9.67 808 9.73 777 0.26 223 9.94 391 391 391 391 391 391 391 391 391 391			9.72 009	0.21 311				
8 9.67 350 9.72 811 0.27 220 9.94 546 53 9 9.67 350 9.72 811 0.27 189 9.94 533 51 10 9.67 398 9.72 872 0.27 128 9.94 533 51 10 9.67 398 9.72 872 0.27 128 9.94 533 51 11 9.67 468 9.72 902 0.27 068 9.94 513 48 13 9.67 468 9.72 903 0.27 037 9.94 506 47 14 9.67 468 9.72 903 0.27 037 9.94 506 47 15 9.67 515 9.73 034 0.26 946 9.94 485 44 16 9.67 539 9.73 054 0.26 946 9.94 485 44 17 9.67 562 9.73 084 0.26 916 9.94 479 43 18 9.67 565 9.73 174 0.26 825 9.94 475 44 20 9.67 633 9.73 175 0.26 825 9.94 472 42 20 9.67 633 9.73 175 <			9.72 750	0.27 250				
9 9.67 374 9.72 841 0.27 159 9.94 533 51 10 9.67 388 9.72 872 0.27 128 9.94 526 50 11 9.67 421 9.72 902 0.27 088 9.94 519 49 12 9.67 445 9.72 903 0.27 068 9.94 513 48 13 9.67 468 9.72 903 0.27 068 9.94 513 48 14 9.67 515 9.73 023 0.26 977 9.94 499 465 15 9.67 515 9.73 023 0.26 977 9.94 499 45 16 9.67 515 9.73 034 0.26 946 9.94 485 44 17 9.67 562 9.73 084 0.26 916 9.94 479 43 18 9.67 586 9.73 114 0.26 886 9.94 472 42 19 9.67 609 9.73 144 0.26 886 9.94 472 42 19 9.67 609 9.73 144 0.26 856 9.94 465 41 20 9.67 633 9.73 105 0.26 795 9.94 451 39 21 9.67 656 9.73 205 0.26 765 9.94 455 38 22 9.67 680 9.73 205 0.26 765 9.94 451 39 24 9.67 726 9.73 295 0.26 765 9.94 431 36 25 9.67 766 9.73 295 0.26 765 9.94 431 36 26 9.67 776 9.73 826 0.26 674 9.94 424 32 26 9.67 780 9.73 386 0.26 674 9.94 424 32 27 9.67 780 9.73 386 0.26 614 9.94 410 33 28 9.67 820 9.73 416 0.26 584 9.94 404 32 29 9.67 843 9.73 416 0.26 584 9.94 397 31 30 9.67 866 9.73 37 60 0.26 614 9.94 410 33 28 9.67 809 9.73 360 0.26 634 9.94 387 37 31 9.67 809 9.73 507 0.26 493 9.94 397 31 30 9.67 866 9.73 567 0.26 493 9.94 397 31 30 9.67 866 9.73 567 0.26 493 9.94 397 31 30 9.67 866 9.73 567 0.26 493 9.94 397 31 30 9.67 866 9.73 567 0.26 493 9.94 397 31 30 9.67 868 9.73 567 0.26 493 9.94 397 31 30 9.67 868 9.73 567 0.26 493 9.94 397 31 30 9.67 868 9.73 567 0.26 493 9.94 399 397 322 9.67 898 9.73 687 0.26 633 9.94 385 29 39 .67 898 9.73 687 0.26 633 9.94 385 29 39 .68 805 9.73 777 0.26 493 9.94 399 376 286 399 399 399 399 399 399 399 399 399 39	7	9.67 327	9.72 780	0.27 220	9.94 546	53		
10								
11 9.67 421 9.72 902 0.27 088 9.94 519 49 12 9.67 445 9.72 932 0.27 088 9.94 513 48 13 9.67 469 9.72 903 0.27 007 9.94 506 47 14 9.67 402 9.72 903 0.27 007 9.94 409 46 15 9.67 515 9.73 023 0.26 917 9.94 492 45 16 9.67 509 9.73 084 0.26 916 9.94 447 43 17 9.67 569 9.73 114 0.26 886 9.94 472 42 19 9.67 609 9.73 144 0.26 886 9.94 472 42 20 9.67 633 9.73 175 0.26 825 9.94 445 41 20 9.67 636 9.73 295 0.26 795 9.94 445 42 21 9.67 636 9.73 295 0.26 785 9.94 445 38 21 9.67 620 9.73 295 0.26 785 9.94 438 37 24 9.67 730 9.73 295	•							
12								
13 9.67 468 9.72 903 0.27 037 9.94 469 46 14 9.67 402 9.72 903 0.26 977 9.94 499 46 15 9.67 515 9.73 023 0.26 977 9.94 499 45 16 9.67 559 9.73 084 0.26 916 9.94 479 43 18 9.67 562 9.73 084 0.26 916 9.94 479 42 19 9.67 669 9.73 114 0.26 886 9.94 465 41 20 9.67 633 9.73 125 0.26 685 9.94 465 41 20 9.67 656 9.73 205 0.26 795 9.94 451 39 21 9.67 656 9.73 205 0.26 705 9.94 445 38 23 9.67 703 9.73 295 0.26 705 9.94 445 38 23 9.67 703 9.73 295 0.26 705 9.94 443 37 24 9.67 726 9.73 295 0.26 735 9.94 433 37 24 9.67 733 0.26 644		9.67 421						
14 9.67 492 9.72 903 0.27 007 9.94 492 45 16 9.67 515 9.73 034 0.26 946 9.94 485 44 17 9.67 562 9.73 084 0.26 946 9.94 479 43 18 9.67 566 9.73 114 0.26 886 9.94 472 42 19 9.67 609 9.73 144 0.26 886 9.94 465 41 20 9.67 633 9.73 175 0.26 825 9.94 458 40 21 9.67 636 9.73 205 0.26 795 9.94 445 38 21 9.67 680 9.73 235 0.26 765 9.94 445 38 23 9.67 703 9.73 295 0.26 705 9.94 445 38 24 9.67 726 9.73 395 0.26 705 9.94 424 35 25 9.67 736 9.73 386 0.26 674 9.94 424 35 25 9.67 786 9.73 386 0.26 674 9.94 494 32 29 9.67 843 9.73 507		9.67 440						
15								
16 9.67 539 9.73 054 0.26 916 9.94 485 44 17 9.67 562 9.73 084 0.26 916 9.94 479 43 18 9.67 560 9.73 114 0.26 886 9.94 465 41 19 9.67 609 9.73 144 0.26 886 9.94 465 41 20 9.67 680 9.73 205 0.26 795 9.94 451 39 21 9.67 680 9.73 205 0.26 765 9.94 451 38 23 9.67 703 9.73 295 0.26 705 9.94 443 37 24 9.67 726 9.73 295 0.26 705 9.94 443 37 24 9.67 773 9.73 326 0.26 674 9.94 424 35 25 9.67 756 9.73 386 0.26 674 9.94 410 33 28 9.67 820 9.73 386 0.26 644 9.94 410 32 29 9.67 843 9.73 376 0.26 844 9.94 397 31 30 9.67 820 9.73 476								
18 9.67 586 9.73 114 0.26 886 9.94 472 42 20 9.67 609 9.73 145 0.26 856 9.94 465 41 20 9.67 633 9.73 175 0.26 825 9.94 465 41 21 9.67 636 9.73 205 0.26 795 9.94 445 38 22 9.67 680 9.73 295 0.26 705 9.94 445 38 23 9.67 703 9.73 295 0.26 705 9.94 438 37 24 9.67 726 9.73 295 0.26 675 9.94 438 37 24 9.67 750 9.73 326 0.26 674 9.94 424 35 25 9.67 750 9.73 356 0.26 674 9.94 424 35 27 9.67 730 9.73 356 0.26 674 9.94 404 32 27 9.67 820 9.73 476 0.26 584 9.94 404 32 29 9.67 833 9.73 57 0.26 433 9.94 390 30 31 9.67 800 9.73 507								
19								
20 9.67 633 9.73 175 0.26 825 9.94 458 40 21 9.67 656 9.73 205 0.26 795 9.94 451 39 22 9.67 680 9.73 295 0.26 785 9.94 438 37 24 9.67 726 9.73 295 0.26 705 9.94 438 37 24 9.67 750 9.73 395 0.26 674 9.94 424 35 26 9.67 779 9.73 386 0.26 644 9.94 410 33 26 9.67 796 9.73 386 0.26 644 9.94 410 33 28 9.67 820 9.73 416 0.26 584 9.94 404 32 29 9.67 843 9.73 446 0.26 584 9.94 390 30 31 9.67 806 9.73 567 0.26 493 9.94 383 29 32 9.67 913 9.73 567 0.26 493 9.94 386 27 33 9.67 365 9.73 657 0.26 433 9.94 362 26 35 9.67 982 9.73 657								
21 9.67 656 9.73 205 0.26 795 9.94 451 39 22 9.67 680 9.73 235 0.26 765 9.94 445 38 23 9.67 726 9.73 295 0.26 705 9.94 438 37 24 9.67 726 9.73 295 0.26 705 9.94 431 36 25 9.67 750 9.73 326 0.26 674 9.94 417 34 26 9.67 773 9.73 386 0.26 644 9.94 417 34 27 9.67 820 9.73 416 0.26 584 9.94 404 32 29 9.67 843 9.73 446 0.26 554 9.94 397 31 30 9.67 880 9.73 476 0.26 524 9.94 397 31 31 9.67 880 9.73 507 0.26 403 9.94 376 28 33 9.67 913 9.73 507 0.26 403 9.94 376 28 33 9.67 929 9.73 507 0.26 403 9.94 376 28 35 9.67 982 9.73 627		1.						
22 9.67 680 9.73 235 0.26 765 9.94 445 38 23 9.67 703 9.73 295 0.26 705 9.94 438 37 24 9.67 726 9.73 295 0.26 6705 9.94 438 37 25 9.67 750 9.73 326 0.26 674 9.94 424 35 26 9.67 773 9.73 386 0.26 614 9.94 410 33 28 9.67 820 9.73 416 0.26 584 9.94 404 32 29 9.67 843 9.73 446 0.26 584 9.94 390 30 30 9.67 866 9.73 476 0.26 493 9.94 390 30 31 9.67 800 9.73 507 0.26 493 9.94 380 30 32 9.67 913 9.73 507 0.26 493 9.94 386 28 33 9.67 936 9.73 507 0.26 403 9.94 369 27 34 9.67 952 9.73 627 0.26 373 9.94 355 25 35 9.68 066 9.73 657								
23								
24 9.67 726 9.73 295 0.26 705 9.94 431 36 25 9.67 750 9.73 326 0.26 674 9.94 447 34 26 9.67 7796 9.73 386 0.26 614 9.94 417 34 27 9.67 796 9.73 386 0.26 614 9.94 410 33 28 9.67 820 9.73 446 0.26 554 9.94 300 30 30 9.67 866 9.73 476 0.26 524 9.94 300 30 31 9.67 890 9.73 507 0.26 493 9.94 383 29 32 9.67 913 9.73 507 0.26 403 9.94 376 28 33 9.67 936 9.73 567 0.26 403 9.94 376 28 34 9.67 959 9.73 507 0.26 403 9.94 362 26 35 9.67 982 9.73 657 0.26 33 9.94 362 26 35 9.67 982 9.73 657 0.26 33 9.94 382 26 36 9.68 066 9.73 657	23							
25 9.67 750 9.73 326 0.26 674 9.94 424 35 26 9.67 773 9.73 356 0.26 644 9.94 417 34 27 9.67 780 9.73 386 0.26 614 9.94 410 33 28 9.67 820 9.73 416 0.26 554 9.94 397 31 30 9.67 866 9.73 476 0.26 524 9.94 390 30 31 9.67 800 9.73 507 0.26 403 9.94 380 30 32 9.67 913 9.73 537 0.26 403 9.94 366 28 33 9.67 936 9.73 597 0.26 403 9.94 369 27 34 9.67 99 9.73 597 0.26 403 9.94 369 26 35 9.67 982 9.73 627 0.26 373 9.94 355 25 36 9.68 006 9.73 657 0.26 373 9.94 355 25 36 9.68 007 9.73 677 0.26 233 9.94 355 25 37 9.68 052 9.73 717		9 67 796						
27	25	$9.67\ 750$		$0.26\ 674$	9.94 424			
28	26			0.26 644				
29 9.67 843 9.73 446 0.26 554 9.94 397 31 30 9.67 866 9.73 476 0.26 524 9.94 390 30 31 9.67 866 9.73 507 0.26 493 9.94 376 28 32 9.67 936 9.73 537 0.26 443 9.94 376 28 33 9.67 936 9.73 597 0.26 403 9.94 362 26 34 9.67 959 9.73 597 0.26 403 9.94 362 26 35 9.67 982 9.73 687 0.26 373 9.94 349 24 37 9.68 006 9.73 687 0.26 373 9.94 349 24 37 9.68 029 9.73 687 0.26 313 9.94 349 24 37 9.68 029 9.73 687 0.26 313 9.94 349 24 38 9.68 029 9.73 747 0.26 283 9.94 328 21 40 9.68 088 9.73 777 0.26 223 9.94 328 21 40 9.68 075 9.73 777			9.73 386					
30 9.67 866 9.73 476 0.26 524 9.94 300 30 31 9.67 890 9.73 507 0.26 493 9.94 383 29 32 9.67 913 9.73 507 0.26 493 9.94 376 28 33 9.67 936 9.73 567 0.26 403 9.94 362 26 34 9.67 959 9.73 597 0.26 403 9.94 362 26 35 9.67 982 9.73 657 0.26 313 9.94 355 25 36 9.68 062 9.73 687 0.26 313 9.94 342 23 37 9.68 029 9.73 687 0.26 313 9.94 342 23 38 9.68 052 9.73 717 0.26 283 9.94 322 23 39 9.68 075 9.73 777 0.26 253 9.94 322 20 40 9.68 194 9.73 867 0.26 193 9.94 321 20 41 9.68 191 9.73 867 0.26 103 9.94 321 20 41 9.68 121 9.73 867								
31 9.67 890 9.73 507 0.26 493 9.94 383 29 32 9.67 913 9.73 567 0.26 463 9.94 376 28 33 9.67 936 9.73 567 0.26 403 9.94 362 26 34 9.67 936 9.73 567 0.26 403 9.94 362 26 35 9.67 982 9.73 657 0.26 373 9.94 355 25 36 9.68 006 9.73 657 0.26 343 9.94 349 24 37 9.68 029 9.73 687 0.26 343 9.94 349 24 37 9.68 052 9.73 717 0.26 283 9.94 335 22 38 9.68 075 9.73 747 0.26 253 9.94 328 21 40 9.68 089 9.73 777 0.26 223 9.94 328 21 41 9.68 144 9.73 867 0.26 103 9.94 307 18 43 9.68 144 9.73 867 0.26 103 9.94 307 18 43 9.68 134 9.73 957								
32 9.67 913 9.73 537 0.26 463 9.94 376 28 33 9.67 936 9.73 567 0.26 433 9.94 376 28 34 9.67 959 9.73 597 0.26 403 9.94 362 26 35 9.67 982 9.73 627 0.26 373 9.94 355 25 36 9.68 006 9.73 687 0.26 313 9.94 345 23 37 9.68 052 9.73 717 0.26 283 9.94 335 22 39 9.68 075 9.73 777 0.26 283 9.94 322 21 40 9.68 098 9.73 777 0.26 223 9.94 321 20 41 9.68 144 9.73 887 0.26 103 9.94 307 18 42 9.68 144 9.73 887 0.26 103 9.94 307 18 43 9.68 167 9.73 887 0.26 103 9.94 293 16 45 9.68 213 9.73 927 0.26 073 9.94 286 15 46 9.68 237 9.73 957								
33 9.67 936 9.73 567 0.26 433 9.94 369 27 34 9.67 959 9.73 597 0.26 403 9.94 362 26 35 9.67 982 9.73 627 0.26 373 9.94 355 25 36 9.68 006 9.73 657 0.26 313 9.94 349 24 37 9.68 029 9.73 687 0.26 313 9.94 335 22 38 9.68 055 9.73 717 0.26 283 9.94 335 22 39 9.68 075 9.73 747 0.26 253 9.94 328 21 40 9.68 098 9.73 777 0.26 223 9.94 322 21 41 9.68 121 9.73 807 0.26 193 9.94 314 19 42 9.68 144 9.73 837 0.26 193 9.94 300 17 44 9.68 190 9.73 897 0.26 103 9.94 293 16 45 9.68 237 9.73 957 0.26 013 9.94 293 16 46 9.68 237 9.73 957 0.26 013 9.94 293 16 47 9.68 237 9.73 957 0.26 013 9.94 279 14 48 9.68 283 9.74 077 0.25 983 9.94 279 14 49 9.68 305 9.74 047 0.25 953 9.94 266 12 49 9.68 305 9.74 047 0.25 953 9.94 259 11 50 9.68 328 9.74 077 0.25 953 9.94 259 11 50 9.68 328 9.74 107 0.25 983 9.94 250 12 51 9.68 351 9.74 107 0.25 983 9.94 255 10 52 9.68 374 9.74 107 0.25 883 9.94 255 10 53 9.68 420 9.74 166 0.25 894 9.94 231 7 54 9.68 420 9.74 166 0.25 894 9.94 231 7 55 9.68 440 9.74 166 0.25 894 9.94 217 5 56 9.68 440 9.74 166 0.25 894 9.94 224 6 57 9.68 420 9.74 166 0.25 894 9.94 217 5 58 9.68 420 9.74 166 0.25 894 9.94 217 5 59 9.68 459 9.74 286 0.25 774 9.94 217 5 56 9.68 440 9.74 136 0.25 894 9.94 210 4 57 9.68 489 9.74 286 0.25 774 9.94 217 5 58 9.68 459 9.74 286 0.25 774 9.94 217 5 58 9.68 554 9.74 316 0.25 684 9.94 210 4 58 9.68 554 9.74 316 0.25 685 9.94 189 1 50 9.68 557 9.74 315 0.25 625 9.94 189 1 50 9.68 557 9.74 315 0.25 625 9.94 189 1						28		
35 9.67 982 9.73 627 0.26 373 9.94 355 25 36 9.68 006 9.73 657 0.26 313 9.94 349 24 37 9.68 029 9.73 687 0.26 313 9.94 342 23 38 9.68 052 9.73 717 0.26 283 9.94 335 22 39 9.68 075 9.73 747 0.26 253 9.94 328 21 40 9.68 098 9.73 777 0.26 223 9.94 314 19 41 9.68 144 9.73 837 0.26 103 9.94 307 18 42 9.68 144 9.73 837 0.26 103 9.94 307 18 43 9.68 167 9.73 897 0.26 103 9.94 300 17 44 9.68 190 9.73 897 0.26 103 9.94 300 17 44 9.68 193 9.73 927 0.26 073 9.94 286 15 45 9.68 213 9.73 927 0.26 073 9.94 286 15 46 9.68 237 9.73 957				0.26433		27		
36 9.68 006 9.73 657 0.26 343 9.94 349 24 37 9.68 029 9.73 687 0.26 313 9.94 342 23 38 9.68 052 9.73 717 0.26 283 9.94 328 21 40 9.68 075 9.73 747 0.26 253 9.94 328 21 40 9.68 088 9.73 777 0.26 223 9.94 328 21 41 9.68 121 9.73 807 0.26 193 9.94 307 18 42 9.68 144 9.73 837 0.26 163 9.94 300 17 43 9.68 167 9.73 897 0.26 103 9.94 293 16 45 9.68 190 9.73 897 0.26 073 9.94 293 16 45 9.68 233 9.73 987 0.26 073 9.94 273 13 47 9.68 236 9.73 987 0.26 073 9.94 273 13 48 9.68 233 9.74 017 0.25 983 9.94 273 13 49 9.68 305 9.74 047								
37 9.68 029 9.73 687 0.26 313 9.94 342 23 38 9.68 052 9.73 717 0.26 283 9.94 335 22 39 9.68 075 9.73 747 0.26 253 9.94 328 21 40 9.68 098 9.73 777 0.26 223 9.94 314 19 41 9.68 121 9.73 807 0.26 193 9.94 314 19 42 9.68 144 9.73 837 0.26 163 9.94 307 18 43 9.68 167 9.73 867 0.26 103 9.94 300 17 44 9.68 190 9.73 897 0.26 103 9.94 293 16 45 9.68 213 9.73 927 0.26 073 9.94 293 16 45 9.68 237 9.73 957 0.26 043 9.94 279 14 47 9.68 237 9.74 017 0.25 963 9.94 279 14 48 9.68 233 9.74 047 0.25 963 9.94 259 11 50 9.68 328 9.74 077								
38 9.68 052 9.73 717 0.26 283 9.94 335 22 39 9.68 075 9.73 747 0.26 253 9.94 328 21 40 9.68 098 9.73 777 0.26 223 9.94 321 20 41 9.68 121 9.73 807 0.26 103 9.94 314 19 42 9.68 144 9.73 837 0.26 163 9.94 307 18 43 9.68 167 9.73 897 0.26 103 9.94 293 16 45 9.68 213 9.73 927 0.26 073 9.94 286 15 46 9.68 237 9.73 987 0.26 043 9.94 279 14 47 9.68 283 9.74 017 0.25 983 9.94 266 12 49 9.68 305 9.74 047 0.25 983 9.94 266 12 49 9.68 305 9.74 077 0.25 983 9.94 259 10 50 9.68 328 9.74 077 0.25 983 9.94 259 10 51 9.68 331 9.74 107								
39 9.68 075 9.73 747 0.26 253 9.94 328 21 40 9.68 098 9.73 777 0.26 223 9.94 321 20 41 9.68 121 9.73 807 0.26 193 9.94 307 18 42 9.68 144 9.73 837 0.26 163 9.94 307 18 43 9.68 167 9.73 867 0.26 103 9.94 300 17 44 9.68 190 9.73 897 0.26 103 9.94 293 16 45 9.68 213 9.73 927 0.26 003 9.94 286 15 46 9.68 237 9.73 957 0.26 013 9.94 279 14 47 9.68 260 9.73 987 0.26 013 9.94 273 13 48 9.68 283 9.74 017 0.25 983 9.94 273 13 49 9.68 353 9.74 077 0.25 983 9.94 252 10 50 9.68 351 9.74 107 0.25 803 9.94 245 9 52 9.68 354 9.74 107								
41 9.68 121 9.73 807 0.26 193 9.94 314 19 42 9.68 144 9.73 837 0.26 163 9.94 307 18 43 9.68 167 9.73 867 0.26 163 9.94 300 17 44 9.68 190 9.73 897 0.26 073 9.94 293 16 45 9.68 213 9.73 927 0.26 073 9.94 279 14 46 9.68 237 9.73 987 0.26 043 9.94 279 14 47 0.68 293 9.74 017 0.25 983 9.94 266 12 49 9.68 305 9.74 047 0.25 923 9.94 259 11 50 9.68 328 9.74 077 0.25 923 9.94 252 10 51 9.68 331 9.74 107 0.25 863 9.94 252 10 52 9.68 374 9.74 107 0.25 863 9.94 252 10 53 9.68 397 9.74 106 0.25 803 9.94 238 8 53 9.68 374 9.74 107	39	9.68 075			9,94 328			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	40	9.68 098	9.73 777	0.26 223	9.94 321	20		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	41	9.68 121	9.73 807	0.26 193	9.94 314	19		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$								
45 9.68 213 9.73 927 0.26 073 9.94 286 15 46 9.68 237 9.73 957 0.26 043 9.94 279 14 47 9.68 290 9.73 987 0.26 013 9.94 273 13 48 9.68 283 9.74 017 0.25 983 9.94 266 12 49 9.68 305 9.74 047 0.25 953 9.94 259 11 50 9.68 328 9.74 077 0.25 923 9.94 252 10 51 9.68 331 9.74 107 0.25 883 9.94 245 9 52 9.68 374 9.74 107 0.25 863 9.94 248 9 53 9.68 397 9.74 106 0.25 863 9.94 231 7 54 9.68 420 9.74 106 0.25 804 9.94 231 7 54 9.68 420 9.74 196 0.25 774 9.94 246 6 55 9.68 436 9.74 256 0.25 774 9.94 217 5 56 9.68 459 9.74 286 0								
46 9.68 237 9.73 957 0.26 043 9.94 279 14 47 9.68 280 9.73 987 0.26 013 9.94 273 13 48 9.68 283 9.74 017 0.25 983 9.94 266 12 49 9.68 305 9.74 047 0.25 953 9.94 259 11 50 9.68 328 9.74 077 0.25 923 9.94 252 10 51 9.68 351 9.74 107 0.25 893 9.94 245 9 52 9.68 374 9.74 137 0.25 803 9.94 245 9 53 9.68 397 9.74 106 0.25 834 9.94 231 7 54 9.68 420 9.74 106 0.25 804 9.94 224 6 55 9.68 433 9.74 226 0.25 774 9.94 217 5 56 9.68 466 9.74 256 0.25 744 9.94 210 4 57 9.68 459 9.74 286 0.25 714 9.94 203 3 58 9.68 512 9.74 316 0.								
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$								
48 9.68 293 9.74 017 0.25 983 9.94 296 12 49 9.68 305 9.74 047 0.25 953 9.94 259 11 50 9.68 328 9.74 077 0.25 923 9.94 252 10 51 9.68 331 9.74 107 0.25 893 9.94 245 9 52 9.68 374 9.74 137 0.25 863 9.94 238 8 53 9.68 397 9.74 166 0.28 834 9.94 231 7 54 9.68 420 9.74 196 0.25 804 9.94 221 6 55 9.68 443 9.74 226 0.25 774 9.94 217 5 56 9.68 466 9.74 256 0.25 744 9.94 217 5 57 9.68 496 9.74 286 0.25 714 9.94 203 3 58 9.68 512 9.74 316 0.25 684 9.94 196 2 59 9.68 534 9.74 345 0.25 684 9.94 189 1 60 9.68 557 9.74 375 0.25		9.68 260			9.94 273			
50 9.68 328 9.74 077 0.25 923 9.94 252 10 51 9.68 351 9.74 107 0.25 893 9.94 245 9 52 9.68 374 9.74 137 0.25 863 9.94 238 8 53 9.68 397 9.74 166 0.25 804 9.94 231 7 54 9.68 420 9.74 196 0.25 804 9.94 224 6 55 9.68 443 9.74 226 0.25 774 9.94 217 5 56 9.68 466 9.74 256 0.25 774 9.94 210 4 57 9.68 499 9.74 286 0.25 714 9.94 203 3 58 9.68 512 9.74 316 0.25 684 9.94 196 2 59 9.68 534 9.74 345 0.25 635 9.94 189 1 60 9.68 557 9.74 375 0.25 625 9.94 182 0 L. Cos. L. Cot. L. Tan. L. Sin. /					9.94 266			
51 9.68 351 9.74 107 0.25 893 9.94 245 9 52 9.68 374 9.74 137 0.25 863 9.94 238 8 53 9.68 397 9.74 166 0.25 804 9.94 231 7 54 9.68 420 9.74 196 0.25 804 9.94 224 6 55 9.68 443 9.74 226 0.25 774 9.94 217 5 56 9.68 496 9.74 256 0.25 744 9.94 210 4 57 9.68 499 9.74 286 0.25 714 9.94 203 3 58 9.68 512 9.74 316 0.25 684 9.94 196 2 59 9.68 534 9.74 345 0.25 635 9.94 189 1 60 9.68 557 9.74 375 0.25 625 9.94 182 0 L. Cos. L. Cot. L. Tan. L. Sin. \(\text{\$\								
52 9.68 374 9.74 137 0.25 863 9.94 238 8 53 9.68 397 9.74 166 0.25 834 9.94 231 7 54 9.68 420 9.74 196 0.25 804 9.94 224 6 55 9.68 443 9.74 226 0.25 774 9.94 217 5 56 9.68 466 9.74 256 0.25 744 9.94 210 4 57 9.68 499 9.74 286 0.25 714 9.94 203 3 58 9.68 512 9.74 316 0.25 684 9.94 196 2 59 9.68 534 9.74 345 0.25 635 9.94 189 1 60 9.68 557 9.74 375 0.25 625 9.94 182 0 L. Cos. L. Cot. L. Tan. L. Sin. /								
53 9.68 397 9.74 166 0.25 834 9.94 231 7 54 9.68 420 9.74 196 0.25 804 9.94 224 6 55 9.68 443 9.74 226 0.25 774 9.94 217 5 56 9.68 466 9.74 256 0.25 744 9.94 210 4 57 9.68 489 9.74 286 0.25 714 9.94 203 3 58 9.68 512 9.74 316 0.25 684 9.94 196 2 59 9.68 534 9.74 345 0.25 635 9.94 189 1 60 9.68 557 9.74 375 0.25 625 9.94 182 0 L. Cos. L. Cot. L. Tan. L. Sin. /						9		
54 9.68 420 9.74 196 0.25 804 9.94 224 6 55 9.68 443 9.74 226 0.25 774 9.94 217 5 56 9.68 496 9.74 256 0.25 744 9.94 210 4 57 9.68 489 9.74 286 0.25 714 9.94 203 3 58 9.68 512 9.74 316 0.25 684 9.94 196 2 59 9.68 534 9.74 345 0.25 655 9.94 189 1 60 9.68 557 9.74 375 0.25 625 9.94 182 0 L. Cos. L. Cot. L. Tan. L. Sin. /						8		
55 9.68 443 9.74 226 0.25 774 9.94 217 5 56 9.68 466 9.74 256 0.25 744 9.94 210 4 57 9.68 489 9.74 286 0.25 714 9.94 203 3 58 9.68 512 9.74 316 0.25 684 9.94 196 2 59 9.68 534 9.74 345 0.25 635 9.94 189 1 60 9.68 557 9.74 375 0.25 625 9.94 182 0 L. Cos. L. Cot. L. Tan. L. Sin. /					9.04.994			
56 9.68 496 9.74 256 0.25 744 9.94 210 4 57 9.68 489 9.74 286 0.25 714 9.94 203 3 58 9.68 512 9.74 316 0.25 684 9.94 196 2 59 9.68 534 9.74 345 0.25 635 9.94 189 1 60 9.68 537 9.74 375 0.25 625 9.94 182 0 L. Cos. L. Cot. L. Tan. L. Sin. /						5		
58 9.68 512 9.74 316 0.25 684 9.94 196 2 59 9.68 534 9.74 345 0.25 635 9.94 189 1 60 9.68 557 9.74 375 0.25 625 9.94 182 0 L. Cos. L. Cot. L. Tan. L. Sin. /			$9.74 \ 256$	0.25 744	9.94 210	4		
59 9.68 534 9.74 345 0.25 655 9.94 189 1 60 9.68 557 9.74 375 0.25 625 9.94 182 0 L. Cos. L. Cot. L. Tan. L. Sin. /						3		
60 9.68 557 9.74 375 0.25 625 9.94 182 0 L. Cos. L. Cot. L. Tan. L. Sin.						1		
L. Cos. L. Cot. L. Tan. L. Sin.								
		L. Cos.			L. Sin.	'		

	L. Sin.	L. Tan.	L. Cot.	L. Cos.	
0	9.68 557	9.74 375	0.25 625	9.94 182	60
	9.68 580	9.74 405	0.25 595	9.94 175	59
$\frac{1}{2}$	9.68 603	9.74 435	0.25 565	9.94 168	58
3	9.68 625	$9.74 \ 46\overline{5}$	$0.25\ 535$	9.94 161	57
4	9.68-648	9.74 494	$0.25\ 506$	9.94 154	56
5	9.68 671	9.74 524	$0.25\ 476$ $0.25\ 446$	9.94 147 9.94 140	55 54
6 7	9.68 694 9.68 716	9.74 554 9.74 583	0.25 446	9.94 133	53
s l	9.68 739	9.74 613	$0.25\ 387$	9.94 126	52
9	$9.68\ 762$	9.74 643	$0.25\ 357$	$9.94\ 119$	51
10	9.68 784	9.74 673	0.25 327	9.94 112	50
-11	9.68 807	9.74 702	0.25 298	9.94 105	49
12 13	9.68 829 9.68 852	9.74 732 9.74 762	0.25 268 0.25 238	9.94 098 9.94 090	48 47
14	9.68 875	9.74 791	0.25 209	9.94 083	46
$\hat{1}\hat{5}$	9.68 897	9.74 821	$0.25\ 179$	9.94 076	45
16	9.68 920	9.74 851	0.25 149	9.94 069	44
17	9.68 942	9.74 880 9.74 910	$0.25\ 120$ $0.25\ 090$	9.94 062	43 42
18 19	9.68 965 9.68 987	9.74 939	$0.25\ 060$ $0.25\ 061$	9.94 055 9.94 048	41
20	9.69 010	9.74 969	$\frac{-0.25\ 031}{0.25\ 031}$	9.94 041	40
21	9.69 032	9.74 998	0.25 002	9.94 034	39
22	9.69 055	9.75 028	0.24 972	9.94 027	38
23	9.69 077	9.75 058	0.24 942	9.94 020	37
24	9.69 100	9.75 087	0.24 913	9.94 012	36
$\frac{25}{26}$	9.69 122 9.69 144	9.75 117 9.75 146	$0.24883 \\ 0.24854$	9.94 005 9.93 998	$\frac{35}{34}$
26 27	9.69 144	9.75 176	0.24 824	9,93 991	33
28	9.69 189	9.75 205	0.24 795	9.93 984	32
29	9.69 212	$9.75 \ 23\overline{5}$	0.24 765	9.93 977	31
30	9.69 234	9.75 264	0.24 736	9.93 970	30
31	9.69 256	9.75 294	$0.24\ 706$	9.93 963	29
32	9.69 279	9.75 323 9.75 353	$0.24\ 677$ $0.24\ 647$	9.93 955	$\frac{28}{27}$
33 34	9,69 301 9,69 323	9.75 382	0.24 647	9.93 948 9.93 941	$\frac{26}{26}$
35	9.69 345	9.75 411	0.24 589	9.93 934	25
36	9.69 368	9.75 441	0.24559	9.93 927	24
37	9.69 390	9.75 470	$0.24\ 530$	9.93 920	23
38 39	9.69 412 9.69 434	9.75 500 9.75 529	$0.24\ 500$ $0.24\ 471$	9.93 912 9.93 905	$\frac{22}{21}$
40	9.69 456	9.75 558	0.24 441	9.93 898	20
41	9.69 479	9.75 588	0.24 412	9.93 891	19
42	9,69 501	9.75 617	0.24 383	9.93 884	18
43	9,69 523	9.75 647	0.24 353	9.93 876	17
44	9.69 545	9.75 676	0.24 324	9.93 869	16
45	9.69 567	9.75 705	0.24 295	9.93 862	15
46 47	9.69 589 9.69 611	9.75 735 9,75 764	$0.24\ 265 \ 0.24\ 236$	9.93 855 9.93 847	14 13
48	9,69 633	9.75 793	0.24 207	9.93 840	12
49	9.69 655	9.75 822	0.24 178	9.93 833	11
50	9.69 677	9.75 852	0.24 148	9.93 826	10
51	9.69 699	9.75 881	0.24 119	9.93 819	9
52 53	9.69721 9.69743	9.75 910 9.75 939	0.24 090 0.24 061	9.93 811 9.93 804	8 7
54	9.69 765	9.75 969	0.24 061	9.93 797	6
55	9.69 787	9.75 998	0.24 002	9.93 789	5
56	9.69 809	9.76 027	0.23 973	9.93782	4
57	9.69 831	9.76 056	0.23 944	9.93 775	3
58 59	9.69 853 9.69 875	9.76 086 9.76 115	$\begin{array}{c} 0.23\ 914 \\ 0.23\ 885 \end{array}$	9.93 768 9.93 760	$\frac{2}{1}$
60	9.69 897	9.76 144	0.23 856	9.93 753	ō
-			L. Tan.	L. Sin.	_
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	,

	30						
,	L. Sin.	L. Tan.	L. Cot.	L. Cos.			
0	9.69 897	9.76 144	0.23 856	9,93 753	60		
1	9.69 919	9.76 173	0.23 827	9.93 746	59		
2	9.69 941	9.76 202	0.23 798	9.93 738	58		
3 4	9,69 963 9,69 984	9.76 231 9.76 261	0.23 769 0.23 739	9.93 731 9.93 724	57 56		
5	9.70 006	9.76 290	0.23 710	9.93 717	55		
6	9.70 028	9.76 319	0.23 681	9.93 709	54		
7	9.70 050	9.76 348	0.23 652	9.93 702	53		
8 9	9.70 072 9.70 093	9.76 377 9.76 406	0.23 623 $0.23 594$	9.93 695 9.93 687	52 51		
10	9.70 115	9.76 435	0.23 565	9.93 680	50		
11	9.70 137	9.76 464	0.23 536	9.93 673	49		
12	9.70 159	9.76 493	0.23 507	9.93 665	48		
13	9.70 180	9.76 522	0.23 478	9.93 658	47		
14	9.70 202	9.76 551	0.23 449	9,93 650	46		
15 16	9.70 224 9.70 245	9.76 580 9.76 609	$0.23\ 420$ $0.23\ 391$	9.93 643 9.93 636	45 44		
17	9.70 267	9.76 639	0.23 361	9.93 628	43		
18	$9.70\ 288$	9.76 668	$0.23\ 332$	9.93 621	42		
19	9.70 310	9.76 697	0,23 303	9.93 614	41		
20	$9.70\ 332$	9.76 725	$0.23\ 275$	9.93 606	40		
21	9.70 353	9.76 754	0.23 246	9.93 599	39		
22 23	9.70 375	9.76 783	$0.23\ 217$ $0.23\ 188$	9.93 591	38		
23	9.70 396 9.70 418	9.76 812 9.76 841	$0.23\ 188$ $0.23\ 159$	9.93 584 9.93 577	37 36		
25	9.70 439	9.76 870	0.23 130	9.93 569	35		
26	9.70 461	9.76 899	0.23 101	9.93 562	34		
27	9.70 482	9,76 928	0.23 072	9.93 554	33		
28 29	9.70 504 9.70 525	9.76 957 9.76 986	0.23 043 0.23 014	9,93 547 9,93 539	32 31		
30	9.70 547	9.77 015	0.22 985	9.93 532	30		
31	9.70 568	9.77 044	0.22 956	9.93 525	29		
32	9.70 590	9.77 073	0.22 927	9.93 517	28		
33	$9.70\ 611$	9.77 101	0.22 899	9.93 510	27		
34	9.70 633	9.77 130	0.22 870	9.93 502	26		
35 36	9.70 654 9.70 675	9.77 159 9.77 188	$0.22841 \\ 0.22812$	9.93 495 9.93 487	25 24		
37	9.70 697	9.77 217	0.22 783	9.93 480	23		
38	9.70 718	9.77 246	0.22754	9.93 472	22		
39	9.70 739	9.77 274	0.22 726	9.93 465	21		
40	9.70 761	9.77 303	0.22 697	9.93 457	20		
41	9.70 782	9.77 332	0.22 668	9.93 450	19		
42 43	9.70 803 9.70 824	9.77 361 9.77 390	0.22 639 0.22 610	9.93 442 9.93 435	18 17		
44	9.70 846	9.77 418	0.22 582	9.93 427	16		
45	9.70 867	9.77 447	0.22553	9.93 420	15		
46	9.70 888	9.77 476	0.22 524	9.93 412	14		
47 48	9.70 909 9.70 931	9.77 505 9.77 533	$0.22495 \\ 0.22467$	9.93 405 9.93 397	13 12		
49	9.70 952	9.77 562	0.22 401 0.22 438	9.93 390	11		
50	9.70 973	9.77 591	0.22 409	9.93 382	10		
51	9.70 994	9.77 619	0.22 381	9,93 375	9		
52	9.71 015	9.77 648	0.22 352	9.93 367	- 8		
53	9.71 036	9.77 677	0.22 323	9.93 360	7		
54 55	9.71 058 9.71 079	9.77 706 9.77 734	0.22 294 0.22 266	9.93 352 9.93 344	6 5		
56	9.71 100	9.77 763	0.22 237	9.93 337	4		
57	$9.71\ 121$	9.77 791	0,22 209	9,93 329	3		
58	9.71 142	9.77 820	0.22 180	9.93 322	2		
59 60	9.71 163	9.77 849	$\begin{array}{r} -0.22\ 151 \\ \hline -0.22\ 123 \end{array}$	9.93 314	1 0		
90					_		
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	,		

,	L. Sin.	L. Tan.	L. Cot.	L. Cos.	
0	9.71 184	9.77 877	0.22 123	9.93 307	60
1	9.71 205	9.77 906	0.22 094	9.93 299	59
$\frac{1}{2}$	9.71 226	9.77 935	0.22 065	9.93 291	58
$\tilde{3}$	9.71 247	9.77 963	$0.22\ 037$	9.93 284	57
4	$9.71\ 268$	9.77 992	-0.22008	9.93 276	56
5	$9.71\ 289$	9.78 020	0.21980	9.93 269	55
6	9.71 310	9.78 049	0.21 951	9.93 261	54
7 8	$9.71\ 331$ $9.71\ 352$	9.78 077 9.78 106	0.21 923 0.21 894	9.93 253 9.93 246	53 52
9	9.71 373	9.78 135	0.21 865	9.93 238	51
10	9.71 393	9.78 163	0.21 837	9,93 230	50
11	9.71 414	9.78 192	0.21 808	9.93 223	49
12	9.71 435	9.78 220	0.21 780	9.93 215	48
13	9.71 456	9.78 249	$0.21\ 751$	9.93 207	47
14	$9.71\ 477$	$9.78\ 277$	$0.21\ 723$	9.93 200	46
15	9.71 498	9.78 306	0.21 694	9.93 192	45
16	9.71 519	9.78 334	$0.21\ 666$ $0.21\ 637$	9.93 184	44
17 18	$9.71\ 539$ $9.71\ 560$	9.78 363 9.78 391	0.21 637 0.21 609	9.93 177 9.93 1 69	$\frac{43}{42}$
19	9.71 581	9.78 419	0.21 581	9.93 161	41
20	9.71 602	9.78 448	0.21 552	9,93 154	40
21	9.71 622	9.78 476	0.21 524	9.93 146	39
$\tilde{2}\tilde{2}$	9.71 643	$9.78\ 50\overline{5}$	0.21 495	9.93 138	38
23	9.71 664	9.78 533	$0.21\ 467$	9.93 131	37
24	9.71 685	$9.78\ 562$	0.21 438	9.93 123	36
25	9.71 705	9.78 590	0.21 410	9.93 115	35
26 27	9.71 726 9.71 747	$9.78\ 618$ $9.78\ 647$	$0.21\ 382 \ 0.21\ 353$	9.93 108 9.93 100	34 33
28	9.71 747 9.71 767	9.78 675	$0.21\ 325$	9.93 092	32
$\frac{20}{29}$	9.71 788	9.78 704	0.21 296	9.93 084	31
30	9.71 809	9.78 732	0.21 268	9.93 077	30
31	9.71 829	9.78 760	0.21 240	9,93 069	29
32	9.71850	9.78 789	0.21 211	9.93 061	28
- 33	9.71 870	9.78 817	$0.21\ 183$	9.93 053	27
34	9.71 891	9.78 845	$0.21\ 15\overline{5}$	9.93 046	26
35	9.71 911 9.71 932	9.78 874 9.78 902	0.21 126 0.21 098	9.93 038 9.93 030	25 24
36 37	$9.71 \ 952$ $9.71 \ 952$	9.78 930	0.21 038	9.93 022	23
38	9.71 973	9.78 959	0.21 041	9.93 014	22
39	9.71 994	9.78 987	$0.21\ 013$	9.93 007	21
40	9.72 014	9.79 015	$0.20~98\bar{5}$	9.92 999	20
41	9.72 034	9.79 043	0.20 957	9.92 991	19
42	$9.72 \ 05\overline{5}$	9.79.072	0.20 928	9.92 983	18
43	9.72 075	9.79 100	0.20 900	9.92 976	17
$\frac{44}{45}$	$9.72\ 096 \ 9.72\ 116$	9.79 128 9.79 156	$0.20872 \\ 0.20844$	9.92 968 9.92 960	16 15
46	9.72116 9.72137	9.79 185	$0.20844 \\ 0.20815$	9.92 952	13
47	9.72 157	9.79 213	0.20 787	9.92 944	13
48	$9.72\ 177$	9.79 241	$0.20\ 759$	9.92 936	12
49	$-9.72\ 198$	9.79 269	0.20 731	9.92 929	11
5 0	9.72 218	9.79 297	0.20 703	9.92 921	10
51	9.72 238	9.79 326	0.20 674	9.92 913	9
52	$\begin{array}{c} 9.72\ 259 \\ 9.72\ 279 \end{array}$	9.79 354	0.20 646	9.92 905	8
53 54	9.72 279 9.72 299	9.79 382	$\begin{array}{c c} 0.20 \ 618 \\ 0.20 \ 590 \end{array}$	9.92 897 9.92 889	$\frac{7}{6}$
55	9.72 320	$9.79\ 410$ $9.79\ 438$	0.20 562	9.92 881	5
56	9,72 340	9.79 466	0.20 534	9.92 874	4
57	$9.72\ 360$	9.79 495	$0.20\ 505$	9.92 866	3
58	9.72 381	9.79 523	$0.20\ 477$	9.92 858	2
59	9.72 401	9.79 551	0.20 449	9.92 850	1
60	9.72 421	9.79 579	0.20 421	9.92 842	0
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	,

v L. Sin. L. Tan. L. Cot. L. Cos. 0 9.72 421 9.79 579 0.20 421 9.92 842 60 1 9.72 441 9.79 635 0.20 385 9.92 834 59 2 9.72 461 9.79 663 0.20 387 9.92 816 56 3 9.72 502 9.79 671 0.20 281 9.92 803 55 5 9.72 502 9.79 776 0.20 224 9.92 787 53 6 9.72 562 9.79 776 0.20 224 9.92 787 53 8 9.72 582 9.79 804 0.20 108 9.92 777 52 9 9.72 602 9.79 888 0.20 118 9.92 763 50 11 9.72 643 9.79 888 0.20 140 9.92 765 49 12 9.72 643 9.79 888 0.20 112 9.92 755 49 12 9.72 643 9.79 88 0.20 084 9.92 747 49 13 9.72 643 9.80 60 0.20 084 9.9	0%					
1 9.72 4411 9.79 607 0.20 393 9.92 834 59 2 9.72 481 9.79 663 0.20 367 9.92 826 58 3 9.72 482 9.79 663 0.20 387 9.92 810 56 5 9.72 522 9.79 747 0.20 253 9.92 795 54 6 9.72 562 9.79 776 0.20 224 9.92 775 53 8 9.72 562 9.79 776 0.20 244 9.92 777 53 9 9.72 602 9.79 800 0.20 168 9.92 775 53 9 9.72 602 9.79 800 0.20 168 9.92 775 51 10 9.72 633 9.79 984 0.20 109 9.92 755 50 11 9.72 633 9.79 980 0.20 108 9.92 755 50 11 9.72 633 9.79 986 0.20 109 9.92 755 50 12 9.72 633 9.79 972 0.20 028 9.92 731 46 13 9.72 733 9.80 006 0.	/	L. Sin.	L. Tan.	L. Cot.	L. Cos.	
2	0	9.72 421	9.79 579	0.20 421	9.92 842	60
3 9.7.2 482 9.79 691 0.20 309 9.92 810 56 5 9.72 502 9.79 691 0.20 309 9.92 810 56 6 9.72 522 9.79 747 0.20 253 9.92 803 56 7 9.72 562 9.79 770 0.20 224 9.92 787 53 8 9.72 582 9.79 804 0.20 196 9.92 771 52 9 9.72 682 9.79 800 0.20 140 9.92 763 50 10 9.72 682 9.79 880 0.20 140 9.92 763 50 11 9.72 633 9.79 988 0.20 112 9.92 763 40 12 9.72 633 9.79 916 0.20 084 9.92 747 48 12 9.72 633 9.79 916 0.20 056 9.92 739 47 14 9.72 733 9.80 060 0.20 028 9.92 731 46 15 9.72 743 9.80 060 0.20 020 9.92 731 46 16 9.72 743 9.80 056		9.72 441	9.79 607	0.20 393		59
4 9,72 502 9,79 691 0,20 309 9,92 803 56 6 9,72 542 9,79 719 0,20 233 9,92 795 54 7 9,72 562 9,79 776 0,20 224 9,92 787 53 8 9,72 562 9,79 804 0,20 196 9,92 777 53 9 9,72 602 9,79 832 0,20 168 9,92 771 51 10 9,72 663 9,79 916 0,20 044 9,92 785 49 11 9,72 663 9,79 916 0,20 084 9,92 747 48 13 9,72 663 9,79 916 0,20 084 9,92 747 48 14 9,72 633 9,79 916 0,20 084 9,92 743 46 14 9,72 703 9,80 000 0,20 000 9,92 733 46 15 9,72 743 9,80 036 0,19 914 9,92 707 43 16 9,72 743 9,80 036 0,19 914 9,92 707 43 17 9,72 833 9,80 034	2					
5 9.72 522 9.79 719 0.20 281 9.92 803 55 6 9.72 542 9.79 776 0.20 224 9.92 785 54 7 9.72 562 9.79 776 0.20 224 9.92 779 53 8 9.72 582 9.79 804 0.20 108 9.92 771 51 10 9.72 622 9.79 882 0.20 140 9.92 763 50 11 9.72 643 9.79 888 0.20 112 9.92 755 49 12 9.72 633 9.79 916 0.20 084 9.92 731 46 12 9.72 633 9.79 914 0.20 068 9.92 731 46 13 9.72 633 9.80 028 0.19 972 9.92 731 46 14 9.72 763 9.80 036 0.19 972 9.92 731 46 15 9.72 763 9.80 036 0.19 972 9.92 715 44 17 9.72 763 9.80 036 0.19 972 9.92 715 44 17 9.72 803 9.80 112 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td></th<>						
6 9.72 542 9.79 776 0.20 224 9.92 787 53 8 9.72 562 9.79 776 0.20 224 9.92 787 53 8 9.72 562 9.79 804 0.20 168 9.92 771 51 10 9.72 662 9.79 860 0.20 140 9.92 763 50 11 9.72 663 9.79 916 0.20 084 9.92 747 48 12 9.72 663 9.79 916 0.20 084 9.92 747 48 13 9.72 663 9.79 916 0.20 084 9.92 743 46 14 9.72 683 9.79 972 0.20 028 9.92 731 46 15 9.72 743 9.80 060 0.20 000 9.92 733 45 15 9.72 743 9.80 066 0.19 912 9.92 707 43 18 9.72 763 9.80 066 0.19 914 9.92 707 43 18 9.72 783 9.80 041 0.19 880 9.92 691 41 19 9.72 803 9.80 168 <t< td=""><td></td><td>9.72 502</td><td></td><td></td><td></td><td></td></t<>		9.72 502				
7 9.72 562 9.79 804 0.20 196 9.92 779 53 8 9.72 802 9.79 804 0.20 196 9.92 779 52 9 9.72 602 9.79 800 0.20 140 9.92 763 50 11 9.72 623 9.79 988 0.20 112 9.92 755 49 12 9.72 633 9.79 944 0.20 056 9.92 739 47 13 9.72 683 9.79 972 0.20 028 9.92 731 46 15 9.72 683 9.79 972 0.20 028 9.92 731 46 15 9.72 743 9.80 028 0.19 972 9.92 715 44 17 9.72 743 9.80 056 0.19 972 9.92 707 43 18 9.72 783 9.80 054 0.19 916 9.92 609 42 20 9.72 863 9.80 112 0.19 886 9.92 607 43 20 9.72 863 9.80 168 0.19 832 9.92 667 38 21 9.72 863 9.80 195 <t< td=""><td></td><td></td><td>9.79 747</td><td></td><td></td><td></td></t<>			9.79 747			
9 9.72 602 9.79 832 0.20 168 9.92 771 51 10 9.72 643 9.79 888 0.20 112 9.92 765 50 11 9.72 643 9.79 988 0.20 112 9.92 735 49 13 9.72 633 9.79 916 0.20 084 9.92 731 46 14 9.72 703 9.79 972 0.20 028 9.92 731 46 15 9.72 743 9.80 000 0.20 000 9.92 731 46 16 9.72 743 9.80 056 0.19 912 9.92 707 43 18 9.72 783 9.80 056 0.19 914 9.92 690 42 20 9.72 803 9.80 112 0.19 880 9.92 691 41 20 9.72 823 9.80 168 0.19 805 9.92 667 38 21 9.72 863 9.80 195 0.19 805 9.92 667 38 22 9.72 863 9.80 195 0.19 805 9.92 667 38 23 9.72 822 9.80 719	7	9.72562	9.79 776	$0.20\ 224$	9.92 787	53
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	10				approximation and the same of	
$ \begin{array}{c} 13\\ 14\\ 9.72\ 683\\ 9.79\ 972\\ 9.79\ 772\\ 3.\\ 9.80\ 000\\ 0.20\ 000\\ 0.99\ 2733\\ 46\\ 15\\ 9.72\ 743\\ 9.80\ 000\\ 0.20\ 000\\ 0.99\ 2733\\ 46\\ 16\\ 9.72\ 743\\ 9.80\ 008\\ 0.19\ 972\\ 9.92\ 715\\ 43\\ 17\\ 9.72\ 763\\ 9.80\ 056\\ 0.19\ 944\\ 9.92\ 707\\ 43\\ 18\\ 9.72\ 763\\ 9.80\ 056\\ 0.19\ 944\\ 9.92\ 707\\ 43\\ 18\\ 9.72\ 763\\ 9.80\ 056\\ 0.19\ 944\\ 9.92\ 707\\ 43\\ 18\\ 9.72\ 783\\ 9.80\ 056\\ 0.19\ 944\\ 9.92\ 609\\ 42\\ 19\\ 9.72\ 803\\ 9.80\ 112\\ 0.19\ 888\\ 9.92\ 691\\ 41\\ 20\\ 9.72\ 823\\ 9.80\ 140\\ 0.19\ 888\\ 9.92\ 691\\ 41\\ 20\\ 9.72\ 823\\ 9.80\ 168\\ 0.19\ 852\\ 9.92\ 667\\ 38\\ 9.80\ 168\\ 0.19\ 852\\ 9.92\ 667\\ 38\\ 9.80\ 23\\ 0.19\ 777\\ 9.92\ 659\\ 9.72\\ 24\\ 9.72\ 902\\ 9.80\ 237\\ 0.19\ 777\\ 9.92\ 659\\ 9.72\\ 24\\ 9.72\ 902\\ 9.80\ 307\\ 0.19\ 638\\ 9.92\ 667\\ 36\\ 9.72\ 942\\ 9.80\ 307\\ 0.19\ 638\\ 9.92\ 635\\ 34\\ 27\\ 9.72\ 962\\ 9.80\ 303\\ 0.19\ 637\\ 9.92\ 613\\ 36\\ 9.73\ 3022\\ 9.80\ 419\\ 9.80\ 391\\ 0.19\ 637\\ 9.92\ 603\\ 30\\ 9.73\ 002\\ 9.80\ 419\\ 0.19\ 553\\ 9.92\ 603\\ 30\\ 9.73\ 002\\ 9.80\ 419\\ 0.19\ 553\\ 9.92\ 505\\ 29\\ 9.73\ 001\\ 9.80\ 474\\ 0.19\ 553\\ 9.92\ 505\\ 29\\ 9.73\ 101\\ 9.80\ 586\\ 0.19\ 444\\ 9.92\ 555\\ 24\\ 37\\ 9.73\ 160\\ 9.80\ 642\\ 0.19\ 308\\ 9.92\ 557\\ 28\\ 39\\ 9.73\ 200\\ 9.80\ 669\\ 0.19\ 331\\ 9.92\ 556\\ 24\\ 40\\ 9.73\ 279\\ 9.80\ 669\\ 0.19\ 331\\ 9.92\ 556\\ 24\\ 40\\ 9.73\ 279\\ 9.80\ 669\\ 0.19\ 331\\ 9.92\ 556\\ 24\\ 40\\ 9.73\ 279\\ 9.80\ 669\\ 0.19\ 331\\ 9.92\ 556\\ 24\\ 40\\ 9.73\ 279\\ 9.80\ 669\\ 0.19\ 331\\ 9.92\ 556\\ 24\\ 40\\ 9.73\ 279\\ 9.80\ 669\\ 0.19\ 100\\ 9.92\ 488\\ 17\\ 44\\ 9.73\ 327\\ 9.80\ 806\\ 609\\ 0.19\ 301\\ 9.92\ 556\\ 24\\ 40\\ 9.73\ 327\\ 9.80\ 806\\ 609\\ 0.19\ 308\\ 9.92\ 556\\ 24\\ 40\\ 9.73\ 337\\ 9.80\ 669\\ 0.19\ 108\\ 9.92\ 556\\ 13\\ 44\\ 9.73\ 377\\ 9.80\ 891\\ 9.80\ 669\\ 0.19\ 108\\ 9.92\ 556\\ 14\\ 9.73\ 377\\ 9.80\ 891\\ 9.80\ 669\\ 0.19\ 108\\ 9.92\ 530\\ 21\\ 44\\ 9.73\ 337\\ 9.80\ 891\\ 9.80\ 806\\ 0.19\ 109\ 892\ 445\\ 109\\ 9.73\ 336\\ 9.73\ 446\\ 9.80\ 9.80\ 566\\ 0.19\ 109\ 9.92\ 445\\ 110\\ 9.73\ 336\\ 9.73\ 446\\ 9.80\ 9.80\ 560\\ 0.19\ 108\\ 9.92\ 433\\ 14\\ 9.73\ 377\\ 9.80\ 891\\ 9.80\ 660\\ 0.18\ 891\\ 9.92\ 366\\ 19\\ 9.73\ 576\\ 19\\ 9.73\ 576\\ 19\\ 9.73\ 576\\ 19\\ 9.8$						
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$						
18 9.72 783 9.80 084 0.19 916 9.92 699 42 20 9.72 803 9.80 112 0.19 888 9.92 691 41 20 9.72 823 9.80 140 0.19 860 9.92 683 40 21 9.72 863 9.80 195 0.19 805 9.92 607 38 22 9.72 883 9.80 223 0.19 777 9.92 659 37 24 9.72 902 9.80 251 0.19 749 9.92 631 36 25 9.72 922 9.80 279 0.19 721 9.92 643 35 26 9.72 942 9.80 335 0.19 665 9.92 643 35 27 9.72 962 9.80 335 0.19 663 9.92 635 34 27 9.72 982 9.80 363 0.19 637 9.92 619 32 28 9.72 982 9.80 363 0.19 637 9.92 611 31 30 9.73 002 9.80 447 0.19 553 9.92 563 30 31 9.73 061 9.80 447		9.72743	$9.80\ 028$		$9.92\ 715$	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						
20 9.72 823 9.80 140 0.19 860 9.92 683 40 21 9.72 843 9.80 168 0.19 832 9.92 675 39 22 9.72 863 9.80 195 0.19 805 9.92 667 38 23 9.72 883 9.80 223 0.19 777 9.92 651 36 24 9.72 902 9.80 279 0.19 721 9.92 651 36 26 9.72 922 9.80 279 0.19 721 9.92 643 35 26 9.72 922 9.80 307 0.19 663 9.92 627 33 27 9.72 982 9.80 333 0.19 665 9.92 627 33 28 9.72 982 9.80 333 0.19 665 9.92 619 32 29 9.73 002 9.80 391 0.19 605 9.92 619 32 29 9.73 002 9.80 391 0.19 637 9.92 613 33 30 9.73 024 9.80 447 0.19 553 9.92 505 29 31 9.73 041 9.80 447						
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$						
$\begin{array}{c} 22\\ 23\\ 9.72863\\ 9.80195\\ 9.80223\\ 9.72983\\ 9.80223\\ 9.80223\\ 0.19777\\ 9.92659\\ 335\\ 25\\ 9.72922\\ 9.80279\\ 9.80375\\ 0.19665\\ 9.92635\\ 34\\ 9.72942\\ 9.80335\\ 0.19665\\ 9.92627\\ 33\\ 28\\ 9.72982\\ 9.80335\\ 0.19665\\ 9.92627\\ 33\\ 28\\ 9.72982\\ 9.80335\\ 0.19665\\ 9.92627\\ 33\\ 28\\ 9.72982\\ 9.80335\\ 0.19665\\ 9.92627\\ 33\\ 29\\ 9.73002\\ 9.80391\\ 0.19600\\ 9.92611\\ 31\\ 30\\ 9.73022\\ 9.80419\\ 0.19553\\ 9.92637\\ 32\\ 9.73061\\ 9.80447\\ 0.19553\\ 9.92555\\ 29\\ 9.733081\\ 9.80520\\ 0.19408\\ 9.92555\\ 24\\ 33\\ 9.73121\\ 9.80526\\ 0.19442\\ 9.92555\\ 24\\ 33\\ 9.73140\\ 9.80526\\ 0.19442\\ 9.92555\\ 24\\ 36\\ 9.73140\\ 9.80586\\ 0.19444\\ 9.92555\\ 24\\ 36\\ 9.73120\\ 9.80664\\ 0.19358\\ 9.92538\\ 22\\ 39\\ 9.73200\\ 9.80669\\ 0.19331\\ 9.92530\\ 21\\ 40\\ 9.73219\\ 9.80669\\ 0.19331\\ 9.92550\\ 21\\ 40\\ 9.73278\\ 9.80669\\ 0.19331\\ 9.92550\\ 21\\ 40\\ 9.73278\\ 9.80781\\ 0.19275\\ 9.92548\\ 17\\ 42\\ 9.73278\\ 9.80781\\ 0.19247\\ 9.92506\\ 18\\ 43\\ 9.73278\\ 9.80781\\ 0.19247\\ 9.92506\\ 18\\ 44\\ 9.733278\\ 9.80781\\ 0.19247\\ 9.92506\\ 18\\ 44\\ 9.733278\\ 9.80781\\ 0.19247\\ 9.92506\\ 18\\ 44\\ 9.733278\\ 9.80781\\ 0.19247\\ 9.92506\\ 18\\ 44\\ 9.73337\\ 9.80697\\ 0.19303\\ 9.92500\\ 21\\ 20\\ 44\\ 9.73337\\ 9.80697\\ 0.19303\\ 9.92548\\ 17\\ 49\\ 9.73336\\ 9.80781\\ 0.19247\\ 9.92506\\ 18\\ 44\\ 9.73337\\ 9.80891\\ 0.19196\\ 9.92448\\ 17\\ 49\\ 9.73337\\ 9.80891\\ 0.19106\\ 9.92448\\ 17\\ 49\\ 9.73337\\ 9.80891\\ 0.19108\\ 9.92482\\ 15\\ 49\\ 9.73336\\ 9.80991\\ 0.19081\\ 9.92449\\ 11\\ 50\\ 9.73346\\ 9.80897\\ 9.80891\\ 0.19108\\ 9.92449\\ 11\\ 50\\ 9.73346\\ 9.80897\\ 9.80891\\ 0.19108\\ 9.92449\\ 11\\ 50\\ 9.73346\\ 9.81806\\ 0.18807\\ 9.92440\\ 11\\ 50\\ 9.73346\\ 9.81806\\ 0.18807\\ 9.92440\\ 11\\ 50\\ 9.73357\\ 9.81106\\ 0.18804\\ 9.92356\\ 29\\ 9.92440\\ 11\\ 50\\ 9.73557\\ 9.81106\\ 0.18804\\ 9.92356\\ 29\\ 9.92366$ 29\\ 449\\ 50\\ 50\\ 9.73557\\ 9.81106\\ 0.18804\\ 9.92356\\ 29\\ 9.92366 29\\ 50\\ 9.73557\\ 9.81106\\ 0.18804\\ 9.92356\\ 29\\ 9.92366 29\\ 50\\ 9.73557\\ 9.81106\\ 0.18804\\ 9.92356\\ 29\\ 9.92366 20\\ 10\\ 10\\ 10\\ 10\\ 1						
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$						
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		0.79.883				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		9.72 902				36
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		9.72 922	9.80 279			
$ \begin{array}{c} 28 \\ 29 \\ 9.73 & 002 \\ 9.80 & 301 \\ 9.80 & 301 \\ 0.19 & 600 \\ 9.92 & 611 \\ 31 \\ 30 \\ 9.73 & 022 \\ 9.80 & 419 \\ 9.80 & 447 \\ 0.19 & 553 \\ 9.92 & 587 \\ 28 \\ 32 \\ 9.73 & 061 \\ 9.80 & 474 \\ 0.19 & 553 \\ 9.92 & 587 \\ 28 \\ 33 \\ 9.73 & 061 \\ 9.80 & 502 \\ 0.19 & 408 \\ 9.92 & 587 \\ 28 \\ 33 \\ 9.73 & 081 \\ 9.80 & 503 \\ 0.19 & 408 \\ 9.92 & 579 \\ 27 \\ 34 \\ 9.73 & 101 \\ 9.80 & 550 \\ 0.19 & 408 \\ 9.92 & 579 \\ 27 \\ 35 \\ 9.73 & 121 \\ 9.80 & 558 \\ 0.19 & 442 \\ 9.92 & 563 \\ 25 \\ 36 \\ 9.73 & 140 \\ 9.80 & 558 \\ 0.19 & 442 \\ 9.92 & 563 \\ 25 \\ 36 \\ 9.73 & 140 \\ 9.80 & 558 \\ 0.19 & 442 \\ 9.92 & 563 \\ 25 \\ 36 \\ 9.73 & 140 \\ 9.80 & 558 \\ 0.19 & 442 \\ 9.92 & 563 \\ 25 \\ 36 \\ 9.73 & 140 \\ 9.80 & 586 \\ 0.19 & 444 \\ 9.92 & 555 \\ 24 \\ 40 \\ 9.73 & 219 \\ 9.80 & 607 \\ 0.19 & 358 \\ 9.92 & 538 \\ 22 \\ 39 \\ 9.73 & 200 \\ 9.80 & 609 \\ 0.19 & 331 \\ 9.92 & 530 \\ 21 \\ 40 \\ 9.73 & 219 \\ 9.80 & 607 \\ 0.19 & 353 \\ 9.80 & 725 \\ 0.19 & 275 \\ 9.92 & 514 \\ 19 \\ 42 \\ 9.73 & 278 \\ 9.80 & 781 \\ 0.19 & 247 \\ 9.92 & 506 \\ 18 \\ 43 \\ 9.73 & 278 \\ 9.80 & 781 \\ 0.19 & 247 \\ 9.92 & 506 \\ 18 \\ 44 \\ 9.73 & 318 \\ 9.80 & 808 \\ 0.19 & 192 \\ 9.92 & 488 \\ 17 \\ 44 \\ 9.73 & 318 \\ 9.80 & 836 \\ 0.19 & 164 \\ 9.92 & 482 \\ 15 \\ 46 \\ 9.73 & 337 \\ 9.80 & 844 \\ 0.19 & 156 \\ 9.92 & 443 \\ 14 \\ 9.73 & 357 \\ 9.80 & 894 \\ 0.19 & 108 \\ 9.92 & 482 \\ 15 \\ 49 \\ 9.73 & 356 \\ 9.80 & 947 \\ 0.19 & 0.19 & 0.8 \\ 9.92 & 447 \\ 14 \\ 9.73 & 356 \\ 9.80 & 947 \\ 0.19 & 0.3 \\ 9.92 & 449 \\ 11 \\ 50 \\ 9.73 & 416 \\ 9.80 & 975 \\ 9.81 & 0.3 \\ 0.18 & 807 \\ 9.92 & 446 \\ 77 \\ 9.73 & 575 \\ 9.81 & 0.3 \\ 0.18 & 807 \\ 9.92 & 446 \\ 77 \\ 9.73 & 575 \\ 9.81 & 0.3 \\ 0.18 & 807 \\ 9.92 & 446 \\ 77 \\ 9.73 & 575 \\ 9.81 & 0.3 \\ 0.18 & 807 \\ 9.92 & 446 \\ 77 \\ 9.73 & 575 \\ 9.81 & 0.3 \\ 0.18 & 807 \\ 9.92 & 446 \\ 77 \\ 9.73 & 575 \\ 9.81 & 100 \\ 0.18 & 807 \\ 9.92 & 457 \\ 12 \\ 9.73 & 457 \\ 9.81 & 100 \\ 0.18 & 807 \\ 9.92 & 445 \\ 10 \\ 10 \\ 50 \\ 9.73 & 575 \\ 9.81 & 100 \\ 0.18 & 807 \\ 9.92 & 446 \\ 77 \\ 9.92 & 446 \\ 77 \\ 9.92 & 446 \\ 77 \\ 9.92 & 446 \\ 77 \\ 9.92 & 446 \\ 77 \\ 9.92 & 446 \\ 77 \\ 9.92 & 446 \\ 77 \\ 9.92 & 446 \\ 77 \\ 9.92 & 446$		9.72942				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$						
$\begin{array}{cccccccccccccccccccccccccccccccccccc$						
$\begin{array}{cccccccccccccccccccccccccccccccccccc$						
$\begin{array}{cccccccccccccccccccccccccccccccccccc$						
$\begin{array}{cccccccccccccccccccccccccccccccccccc$						26
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						25
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$						
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			9.80 697		9.92 522	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$					9.92 514	19
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						18
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	43	9.73278	9.80.781	0.19 219		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		9.73 298				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		9.73 318				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	49	$-9.73\ 396$		$-0.19\ 053$	9.92 449	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	50	9.73 416	9.80 975	$-0.19 \ 025$		10
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						8
55 9.73 513 9.81 113 0.18 887 9.92 400 5 56 9.73 533 9.81 141 0.18 899 9.92 302 4 57 9.73 552 9.81 109 0.18 831 9.92 384 3 58 9.73 572 9.81 196 0.18 804 9.92 376 2 59 9.73 591 9.81 224 0.18 776 9.92 307 1 60 9.73 611 9.81 252 0.18 748 9.92 359 0						6
56 9.73 533 9.81 141 0.18 859 9.92 392 4 57 9.73 552 9.81 109 0.18 831 9.92 384 3 58 9.73 572 9.81 196 0.18 804 9.92 376 2 59 9.73 591 9.81 224 0.18 776 9.92 307 1 60 9.73 611 9.81 252 0.18 748 9.92 359 0						
57 9.73 552 9.81 169 0.18 831 9.92 384 3 58 9.73 572 9.81 196 0.18 804 9.92 376 2 59 9.73 591 9.81 224 0.18 776 9.92 367 1 60 9.73 611 9.81 252 0.18 748 9.92 359 0						4
60 9.73 611 9.81 252 0.18 748 9.92 359 0		9.73 552			9.92 384	3
60 9.73 611 9.81 252 0.18 748 9.92 359 0						2
00 1111 011 1112 0.11 110		_				
L. Cos. L. Cot. L. Tan. L. Sin.	60	9.73 611	9.81 252	0.18 748	9.92 359	U
		L. Cos.	L. Cot.	L. Tan.	L. Sin.	,

·	L. Sin.	L. Tan.	L. Cot.	L. Cos.	
0	9.73 611	9.81 252	0.18 748	9.92 359	60
1	9.73 630	9.81 279	0.18 721	9.92 351	59
2	$9.73 \ 650$	$9.81\ 307$	0.18 693	$9.92\ 343$	58
3	9.73 669	9.81 335	0.18 665	9.92 335	57
4 5	9.73 689 9.73 708	9.81 362 9.81 390	0.18 638 0.18 610	$9.92\ 326$ $9.92\ 318$	56 55
6	$9.73\ 727$	9.81 418	0.18 582	$9.92\ 310$	54
7	9.73 747	9.81 445	$0.18\ 55\overline{5}$	$9.92\ 302$	53
8	9.73.766	9.81 473	0.18 527	9.92 293	-52
9	9.73 785	9.81 500	0.18 500	9.92 285	51
10	9.73 805	9.81 528	0.18 472	9.92 277	50
11	9.73 824	9.81 556	0.18 444	9.92 269	49
12 13	9.73 843 9.73 863	9.81 583 9.81 611	$\begin{bmatrix} 0.18 \ 417 \ 0.18 \ 389 \end{bmatrix}$	$9.92\ 260$ $9.92\ 252$	48 47
14	9.73 882	9.81 638	$0.18\ 362$	9.92 244	46
15	9.73 901	9.81 666	0.18 334	$9.92\ 235$	45
16	9.73 921	9.81 693	0.18 307	9.92 227	44
17	9.73 940 9.73 959	9.81 721 9.81 748	$egin{array}{c} 0.18\ 279 \ 0.18\ 252 \ \end{array}$	9.92 219 9.92 211	$\frac{43}{42}$
18 19	9.73 978	9.81 776	$0.18\ 232$ $0.18\ 224$	$9.92\ 202$	42
20	9.73 997	9.81 803	$\frac{-0.18}{0.18} \frac{221}{197}$	9.92 194	40
21	9.74 017	9.81 831	0.18 169	9.92 186	39
22	9.74 036	9.81 858	0.18 142	$9.92\ 177$	38
23	$9.74\ 055$	9.81 886	0.18 114	$9.92\ 169$	37
24	9.74 074	9.81 913	0.18 087	9.92 161	36
$\frac{25}{26}$	9.74 093 9.74 113	9.81 941 9.81 968	$\begin{array}{c c} 0.18\ 059 \\ 0.18\ 032 \end{array}$	9.92 152 9.92 144	35 34
27	9.74 132	9.81 996	0.18 004	9.92 136	33
$\overline{28}$	$9.74\ 151$	9.82 023	0.17 977	$9.92\ 127$	32
29	$9.74\ 170$	$9.82\ 051$	0.17 949	9.92 119	31
30	9.74 189	$9.82\ 078$	0.17 922	9.92 111	30
31	9.74 208	9.82 106	0.17 894	9.92 102	29
32 33	9.74 227 9.74 246	$9.82\ 133 \ 9.82\ 161$	0.17 867 0.17 839	9.92 094 9.92 086	$\frac{28}{27}$
34	9.74 265	9.82 188	0.17 812	9.92 077	26
35	$9.74\ 284$	$9.82\ 215$	0.17 785	9.92 069	25
36	9.74 303	9.82 243	0.17 757	9.92 060	24
37 38	9.74 322 9.74 341	9.82 270 9.82 298	$\begin{array}{c c} 0.17 \ 730 \\ 0.17 \ 702 \end{array}$	9.92 052 9.92 044	$\frac{23}{22}$
39	9.74 360	9.82 325	0.17 675	9.92 035	$\tilde{2}\tilde{1}$
40	9.74 379	9.82 352	0.17 648	9.92 027	20
41	9.74 398	9.82 380	0.17 620	9.92 018	19
42	9.74 417	9.82 407	0.17 593	9.92 010	18
43	$9.74 \ 436$	$9.82\ 43\overline{5}$	0.17 565	9.92 002	17
41	9.74 455	9.82 462 9.82 489	0.17 538 0.17 511	9.91993 9.91985	16
$\frac{45}{46}$	9.74 474 9.74 493	9.82 517	0.17 483	9.91 985	15 14
47	9.74 512	9.82 544	0.17 456	9.91 968	13
48	$9.74\ 531$	9.82 571	0.17 429	9.91 959	12
49	9.74 549	9.82 599	0.17 401	9.91 951	11
50	9.74 568	9.82 626	0.17 374	9.91 942	10
51 52	9.74587 9.74606	9.82 653 9.82 681	0.17 347	9.91 934 9.91 925	9
53 53	9.74606 9.74625	9.82 681 9.82 708	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	9.91 923	8 7
54	9.74 644	9.82 735	$0.17 \ 26\overline{5}$	9.91 908	6
55	9.74 662	9.82 762	$0.17\ 238$	9.91 900	5
56	9.74 681	9.82 790	$0.17\ 210$	9.91 891 9.91 883	4 3
57 58	9.74 700 9.74 719	9.82 817 9.82 844	0.18 183 0.17 156	9.91 883	$\frac{3}{2}$
59	9.74 737	9.82 871	0.17 129	9.91 866	$\frac{2}{1}$
60	9.74 756	9.82 899	0.17 101	9.91 857	0
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	,

	04						
'	L. Sin.	L. Tan.	L. Cot.	L. Cos.			
0	9.74 756	9.82 899	0.17 101	9.91 857	60		
1	9.74 775	9.82 926	0.17 074	9.91 849	59		
2	9.74 794	9.82 953	$0.17 \ 047 \ 0.17 \ 020$	9.91 840 9.91 832	58 57		
3 4	9.74 812 9.74 831	9.82 980 9.83 008	0.17 020 0.16 992	9.91 823	56		
5	9.74 850	$9.83 \ 03\overline{5}$	0.16 965	9.91 815	55		
6	9.74 868	$9.83\ 062$	0.16 938	9.91 806	54		
7	9.74 887	9.83 089 9.83 117	$0.16911 \\ 0.16883$	9.91 798 9.91 789	53 52		
8 9	9.74 906 9.74 924	9.83 144	0.16 856	9.91 781	51		
10	9.74 943	9.83 171	0.16 829	9.91 772	50		
11	9.74 961	9.83 198	0.16 802	9.91 763	49		
12	9.74 980	$9.83\ 225$	$0.16\ 77\overline{5}$	$9.91.75\overline{5}$	48		
13	9.74 999	9.83 252	0.16 748	9.91 746	47		
14	9.75 017 9.75 036	9.83 280 9.83 307	0.16 720 0.16 693	9.91 738 9.91 729	46 45		
15 16	9.75 054	9.83 334	0.16 666	9.91 720	44		
17	9.75 073	9.83 361	0.16 639	9.91 712	43		
18	9.75 091	9,83 388	0.16 612	9.91 703	42		
19	9.75 110	9.83 415	0.16 585	9.91 695	41		
20	9.75 128	9.83 442	0.16 558	9.91 686	40		
21	9.75 147	9.83 470 9.83 497	$0.16530 \\ 0.16503$	$9.91\ 677$ $\overline{9.91}\ 669$	39 38		
22 23	9.75 165 9.75 184	9.83 524	0.16 476	9.91 660	37		
24	9.75 202	9.83 551	0.16 449	9.91 651	36		
25	$9.75 \ 221$	9.83 578	0.16 422	9.91 643	35		
26	9.75 239 9.75 258	9.83 605 9.83 632	0.16 395 0.16 368	9.91 634 9.91 625	34 33		
27 28	9.75 276	9.83 659	0.16 341	9.91 617	32		
29	9.75 294	9.83 686	0.16 314	9.91 608	31		
30	9.75 313	9.83 713	0.16 287	9.91 599	30		
31	9.75 331	9.83 740	0.16 260	9.91 591	29		
32	9.75 350	9.83 768	0.16 232	9.91 582 9.91 573	28 27		
33 34	9.75 368 9.75 386	9.83 795 9.83 822	0.16 205 0.16 178	9.91 565	26		
35	9.75 405	9.83 849	0.16 151	9.91 556	25		
- 36	9.75 423	9.83 876	0.16 124	9.91 547	24		
37	9.75 441	9.83 903	0.16 097	9.91 538 9.91 530	$\frac{23}{22}$		
38	9.75 459 9.75 478	9.83 930 9.83 957	0.16 070 0.16 043	9.91 521	21		
40	9.75 496	9.83 984	0.16 016	9.91 512	20		
41	9.75 514	9.84 011	0.15 989	9.91 504	19		
42	9.75 533	9.84 038	0.15962	9.91 495	18		
43	9.75 551	9.84 065	0.15 935	9.91 486	17		
44 45	9.75 569 9.75 587	9.84 092, 9.84 119	0.15 908 0.15 881	9.91 477 9.91 469	16 15		
46	9.75 605	9,84 146	0.15 854	9.91 460	14		
47	9.75 624	9.84 173	0.15 827	9.91 451	13		
48	9.75 642	9.84 200	$0.15800 \\ 0.15773$	9.91 442 9.91 433	12 11		
49	9.75 660	9.84 227			10		
50	9.75 678	9.84 254	$\frac{-0.15746}{0.15720}$	$= \frac{9.91425}{9.91416}$	9		
51 52	9.75 696 9.75 714	9.84 280 9.84 307	0.15 720 0.15 693	9.91 416	8		
53	9.75 733	9.84 334	0.15 666	9.91 398	7		
54	$9.75\ 751$	9.84 361	0.15 639	9.91 389	- 6		
55	9.75 769	9.84 388 9.84 415	$0.15 612 \\ 0.15 585$	9.91 381 9.91 372	5 4		
56 57	9.75 787 9.75 805	9.84 442	0.15 558	9.91 363	3		
58	9.75 823	9.84 469	$0.15\ 531$	9.91 354	2		
59	9.75 841	9.84 496	0.15 504	9.91 345	1		
60	9.75 859	9.84 523	0.15 477	9,91 336	0		
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	'		

,	L. Sin.	L. Tan.	L. Cot.	L. Cos.	
0	9.75 859	9.84 523	0.15 477	9.91 336	60
	9.75 877	9.84 550	0.15 450	9.91 328	59
$\frac{1}{2}$	9.75 895	9.84 576	0.15 424	9.91 328	58
3	9.75 913	9.84 603	0.15 397	9.91 310	57
4	9.75 931	9.84 630	0.15 370	9.91 301	56
5	9.75 949	9.84 657	0.15 343	9.91 292	55
6	9.75 967	9.84 684	0.15 316	9.91 283	54
7 8	9.75 985 9.76 003	9.84 711 9.84 738	0.15 289 0.15 262	9.91 274 9.91 266	53 52
9	9.76 021	9.84 764	0.15 236	9.91 257	51
10	9.76 039	9.84 791	0.15 200	9.91 248	50
11	9.76 057	9.84 818	0.15 182	9.91 239	49
12	$9.76\ 075$	9.84 845	0.15 155	9.91 230	48
13	9.76 093	9.84 872	0.15 128	9.91 221	47
14	$9.76\ 111$	9.84 899	0.15 101	9.91 212	46
15	$9.76\ 129$	9.84 925	$0.15\ 075$	9.91 203	45
16	9.76 146	9.84 952	0.15 048	9.91 194	44
17	9.76 164	9.84 979	0.15 021	9.91 185	43
18	$9.76\ 182$ $9.76\ 200$	9.85 006 9.85 033	0.14 994 0.14 967	9.91 176	42 41
19				9.91 167	
20	9.76 218	9.85 059	0.14 941	9.91 158	40
$\frac{21}{22}$	9.76 236 9.76 253	9.85 086 9.85 113	0.14 914 0.14 887	9.91 149 9.91 141	39 38
23	9.76 271	9.85 140	0.14 860	9.91 132	37
24	$9.76\ 289$	9.85 166	0.14 834	9.91 123	36
25	9.76 307	9.85 193	0.14 807	9.91 114	35
26	$9.76\ 324$	9.85 220	0.14 780	$9.91\ 10\overline{5}$	34
27	$9.76\ 342$	$9.85\ 247$	$0.14\ 753$	9.91 096	33
28	$9.76\ 360$	$9.85\ 273$	0.14727	9.91 087	32
29	9.76 378	9.85 300	0.14 700	9.91 078	31
30	9.76 395	9.85 327	0.14 673	9.91 069	30
31	$9.76 \ 413$	$9.85\ 354$	0.14 646	9.91 060	29
32	$9.76 \ 431$	9,85 330	0.14 620	9.91 051	28.
33	9.76 448	9.85 407	0.14 593	9.91 042	27
34 35	9.76 466 9.76 484	9.85 434 9.85 460	$0.14\ 566$ $0.14\ 540$	9.91 033 9.91 023	$\frac{26}{25}$
36	9.76 501	9.85 487	0.14 513	9.91 014	24
37	9.76 519	9.85 514	0.14 486	9.91 005	$\overline{23}$
38	$9.76\ 537$	9.85 540	0.14 460	9.90 996	22
39	$9.76\ 554$	9.85 567	$0.14\ 433$	9.90 987	21
40	$9.76\ 572$	9.85 594	0.14 406.	9.90 978	20
41	9.76 590	9.85 620	0.14 380	9.90 969	19
42	$9.76\ 607$	9.85 647	$0.14\ 353$	9.90 960	18
43	9.76625	9.85 674	0.14 326	9.90 951	17
44	9.76 642	9.85 700	0.14 300	9.90 942	16
$\frac{45}{46}$	9.76 660 9.76 677	9.85 727	$0.14\ 273 \ 0.14\ 246$	9.90 933	15 14
46	9.76 695	9.85 754 9.85 780	$0.14\ 246$ $0.14\ 220$	9.90924 9.90915	13
48	$9.76\ 712$	9.85 807	0.14 220	9.90 906	12
49	9.76 730	9.85 834	0.14 166	9.90 896	11
50	9.76 747	9.85 860	0.14 140	9.90 887	10
51	9.76 765	9.85 887	0.14 113	9.90 878	9
52	9.76782	9.85 913	0.14 087	9.90 869	
53	9.76800	$9.85\ 940$	0.14 060	9.90 860	8 7
54	9.76 817	9.85 967	0.14 033	9.90 851	6
55	9.76 835	9.85 993	0.14 007	9.90 842	5
56 57	9.76 852	9.86 020	0.13 980	9.90 832	$\frac{4}{3}$
57 58	9.76 870 9.76 887	9.86 046 9.86 073	$0.13954 \\ 0.13927$	9.90 823 9.90 814	$\frac{3}{2}$
59	9.76 904	9.86 100	0.13927 0.13900	9.90814 9.90805	1
60	9.76 922	9.86 126	0.13 874	9,90 796	ô
_	L. Cos.	L. Cot.	L. Tan.	L. S'n.	
	L. 003.		L. Tan.	L, SII,	,

7 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	1. Sin. 9.76 922 9.76 939 9.76 937 9.76 974 9.76 991 9.77 099 9.77 026 9.77 043 9.77 078 9.77 078 9.77 078 9.77 104 9.77 164 9.77 164 9.77 164 9.77 164 9.77 164 9.77 164 9.77 164 9.77 266 9.77 27 9.77 27 9.77 27 9.77 27 9.77 27 9.77 27 9.77 27 9.77 27 9.77 27 9.77 27 9.77 27 9.77 27 9.77 27 9.77 27 9.77 30 9.77 30 9.77 30	L. Tan. 9.86 126 9.86 153 9.86 179 9.86 206 9.86 239 9.86 259 9.86 359 9.86 338 9.86 392 9.86 418 9.86 445 9.86 471 9.86 471 9.86 557 9.86 557 9.86 603 9.86 603 9.86 656 9.86 683	L. Cot. 0.13 874 0.13 847 0.13 847 0.13 794 0.13 768 0.13 715 0.13 635 0.13 635 0.13 635 0.13 582 0.13 582 0.13 599 0.13 592 0.13 476 0.13 449 0.13 397 0.13 397	9.90 796 9.90 787 9.90 787 9.90 787 9.90 768 9.90 750 9.90 750 9.90 741 9.90 731 9.90 722 9.90 713 9.90 694 9.90 685 9.90 667 9.90 667 9.90 668 9.90 669 9.90 639 9.90 630 9.90 630	59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41
1 2 3 4 4 5 6 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	9.76 939 9.76 957 9.76 974 9.76 991 9.77 099 9.77 026 9.77 043 9.77 061 9.77 078 9.77 199 9.77 147 9.77 149 9.77 164 9.77 181 9.77 199 9.77 216 9.77 233 9.77 256 9.77 285 9.77 302	9.86 153 9.86 179 9.86 296 9.86 292 9.86 293 9.86 299 9.86 382 9.86 382 9.86 382 9.86 471 9.86 551 9.86 656 9.86 630 9.86 630 9.86 656 9.86 656	0.13 847 0.13 821 0.13 794 0.13 768 0.13 715 0.13 688 0.13 635 0.13 608 0.13 555 0.13 555 0.13 559 0.13 502 0.13 476 0.13 449 0.13 423 0.13 370 0.13 370	9.90 787 9.90 777 9.90 778 9.90 759 9.90 759 9.90 751 9.90 731 9.90 731 9.90 704 9.90 694 9.90 685 9.90 676 9.90 667 9.90 668 9.90 668 9.9	59 58 57 56 55 54 53 52 51 50 48 47 46 45 44 43 42
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	9.76 957 9.76 974 9.76 991 9.77 096 9.77 026 9.77 043 9.77 043 9.77 078 9.77 078 9.77 130 9.77 147 9.77 149 9.77 164 9.77 181 9.77 181 9.77 233 9.77 256 9.77 268 9.77 285 9.77 302	9.86 179 9.86 206 9.86 232 9.86 259 9.86 282 9.86 312 9.86 338 9.86 365 9.86 392 9.86 418 9.86 441 9.86 498 9.86 524 9.86 551 9.86 677 9.86 630 9.86 630 9.86 630	0.13 821 0.13 794 0.13 768 0.13 741 0.13 715 0.13 688 0.13 635 0.13 635 0.13 635 0.13 555 0.13 555 0.13 502 0.13 423 0.13 423 0.13 370 0.13 370	9,90 777 9,90 768 9,90 759 9,90 750 9,90 750 9,90 731 9,90 722 9,90 713 9,90 694 9,90 685 9,90 676 9,90 667 9,90 668 9,90 6630 9,90 630 9,90 630 9,90 630 9,90 630	58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42
3 4 4 5 6 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	9.76 974 9.76 991 9.77 099 9.77 026 9.77 043 9.77 061 9.77 078 9.77 130 9.77 130 9.77 147 9.77 164 9.77 181 9.77 181 9.77 216 9.77 216 9.77 250 9.77 268 9.77 285 9.77 302	9.86 296 9.86 232 9.86 259 9.86 259 9.86 312 9.86 338 9.86 338 9.86 392 9.86 445 9.86 447 9.86 471 9.86 524 9.86 551 9.86 630 9.86 630	0.13 794 0.13 768 0.13 741 0.13 715 0.13 682 0.13 662 0.13 635 0.13 608 0.13 555 0.13 555 0.13 529 0.13 570 0.13 476 0.13 449 0.13 423 0.13 370 0.13 344	9.90 768 9.90 750 9.90 750 9.90 750 9.90 741 9.90 722 9.90 713 9.90 704 9.90 685 9.90 667 9.90 667 9.90 639 9.90 639 9.90 630 9.90 630 9.90 630 9.90 630	57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	9.76 991 9.77 009 9.77 026 9.77 043 9.77 061 9.77 078 9.77 078 9.77 17 9.77 130 9.77 147 9.77 164 9.77 181 9.77 181 9.77 216 9.77 233 9.77 256 9.77 268 9.77 285 9.77 302	9.86 232 9.86 259 9.86 285 9.86 312 9.86 335 9.86 305 9.86 418 9.86 441 9.86 441 9.86 541 9.86 551 9.86 600 9.86 630 9.86 656 9.86 683	0.13 768 0.13 741 0.13 715 0.13 688 0.13 662 0.13 635 0.13 698 0.13 555 0.13 529 0.13 502 0.13 423 0.13 423 0.13 370 0.13 344	9.90 759 9.90 750 9.90 741 9.90 731 9.90 722 9.90 713 9.90 704 9.90 694 9.90 685 9.90 667 9.90 667 9.90 648 9.90 639 9.90 630 9.90 630 9.90 630	56 55 54 53 52 51 50 49 48 47 46 45 44 43 42
5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	9.77 009 9.77 026 9.77 043 9.77 061 9.77 078 9.77 095 9.77 192 9.77 140 9.77 144 9.77 181 9.77 181 9.77 216 9.77 233 9.77 256 9.77 268 9.77 285 9.77 302	9.86 259 9.86 289 9.86 312 9.86 338 9.86 365 9.86 389 9.86 418 9.86 441 9.86 441 9.86 524 9.86 551 9.86 630 9.86 630 9.86 630	0.13 741 0.13 715 0.13 688 0.13 662 0.13 635 0.13 608 0.13 582 0.13 555 0.13 555 0.13 502 0.13 476 0.13 449 0.13 423 0.13 370 0.13 370	9.90 750 9.90 741 9.90 731 9.90 722 9.90 713 9.90 694 9.90 685 9.90 676 9.90 667 9.90 668 9.90 668	55 54 53 52 51 50 49 48 47 46 45 44 43 42
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	9.77 026 9.77 043 9.77 041 9.77 061 9.77 095 9.77 112 9.77 130 9.77 147 9.77 164 9.77 181 9.77 216 9.77 216 9.77 223 9.77 258 9.77 268	9.86 285 9.86 318 9.86 338 9.86 338 9.86 392 9.86 418 9.86 445 9.86 471 9.86 471 9.86 551 9.86 577 9.86 630 9.86 630 9.86 630	0.13 715 0.13 688 0.13 662 0.13 635 0.13 608 0.13 555 0.13 529 0.13 57 0.13 476 0.13 449 0.13 423 0.13 397 0.13 344	9.90 741 9.90 731 9.90 722 9.90 713 9.90 704 9.90 685 9.90 676 9.90 667 9.90 667 9.90 639 9.90 630 9.90 630 9.90 630	54 53 52 51 50 49 48 47 46 45 44 43 42
7 8 9 10 11 12 13 14 15 16 17 18 19 20	9.77 043 9.77 061 9.77 078 9.77 078 9.77 199 9.77 130 9.77 147 9.77 164 9.77 164 9.77 199 9.77 216 9.77 233 9.77 250 9.77 268 9.77 285 9.77 302	9.86 312 9.86 338 9.86 365 9.86 392 9.86 418 9.86 471 9.86 498 9.86 551 9.86 630 9.86 630 9.86 656 9.86 683	0.13 688 0.13 662 0.13 635 0.13 698 0.13 555 0.13 555 0.13 592 0.13 476 0.13 449 0.13 423 0.13 397 0.13 370	9.90 731 9.90 722 9.90 703 9.90 704 9.90 694 9.90 685 9.90 667 9.90 667 9.90 630 9.90 630 9.90 630 9.90 630	53 52 51 50 49 48 47 46 45 44 43 42
8 9 10 11 12 13 14 15 16 17 18 19 20 21	9.77 061 9.77 078 9.77 095 9.77 195 9.77 130 9.77 147 9.77 164 9.77 181 9.77 189 9.77 233 9.77 256 9.77 268 9.77 285 9.77 302	9.86 338 9.86 395 9.86 392 9.86 418 9.86 445 9.86 471 9.86 498 9.86 524 9.86 577 9.86 603 9.86 630 9.86 630	0.13 662 0.13 635 0.13 608 0.13 582 0.13 555 0.13 559 0.13 502 0.13 476 0.13 449 0.13 423 0.13 370 0.13 344	9.90 722 9.90 713 9.90 704 9.90 694 9.90 685 9.90 667 9.90 657 9.90 648 9.90 639 9.90 630 9.90 620	52 51 50 49 48 47 46 45 44 43 42
10 11 12 13 14 15 16 17 18 19 20	9.77 078 9.77 095 9.77 109 9.77 130 9.77 147 9.77 164 9.77 181 9.77 216 9.77 233 9.77 250 9.77 258 9.77 268	9.86 392 9.86 418 9.86 471 9.86 471 9.86 524 9.86 551 9.86 5577 9.86 603 9.86 636 9.86 636	0.13 608 0.13 582 0.13 555 0.13 529 0.13 502 0.13 476 0.13 449 0.13 423 0.13 307 0.13 370	9.90 704 9.90 694 9.90 685 9.90 676 9.90 667 9.90 648 9.90 639 9.90 630 9.90 620	50 49 48 47 46 45 44 43 42
11 12 13 14 15 16 17 18 19 20	9.77 112 9.77 130 9.77 147 9.77 164 9.77 164 9.77 181 9.77 216 9.77 233 9.77 250 9.77 250 9.77 268 9.77 285 9.77 302	9.86 418 9.86 445 9.86 471 9.86 498 9.86 524 9.86 551 9.86 657 9.86 630 9.86 656 9.86 683	0.13 582 0.13 555 0.13 529 0.13 502 0.13 476 0.13 449 0.13 423 0.13 397 0.13 370	9.90 694 9.90 685 9.90 676 9.90 667 9.90 657 9.90 639 9.90 630 9.90 620	49 48 47 46 45 44 43 42
12 13 14 15 16 17 18 19 20	9.77 130 9.77 147 9.77 164 9.77 181 9.77 199 9.77 216 9.77 250 9.77 268 9.77 285 9.77 302	9.86 445 9.86 471 9.86 498 9.86 524 9.86 551 9.86 577 9.86 603 9.86 630 9.86 656 9.86 683	0.13 555 0.13 529 0.13 502 0.13 476 0.13 449 0.13 423 0.13 397 0.13 370	9.90 685 9.90 676 9.90 667 9.90 657 9.90 648 9.90 639 9.90 630 9.90 620	48 47 46 45 44 43 42
13 14 15 16 17 18 19 20	9.77 147 9.77 164 9.77 181 9.77 199 9.77 216 9.77 233 9.77 250 9.77 268 9.77 285 9.77 302	9.86 471 9.86 498 9.86 524 9.86 551 9.86 577 9.86 603 9.86 630 9.86 656 9.86 683	0.13 529 0.13 502 0.13 476 0.13 449 0.13 423 0.13 397 0.13 370	9.90 676 9.90 667 9.90 657 9.90 648 9.90 639 9.90 630 9.90 620	47 46 45 44 43 42
14 15 16 17 18 19 20	9.77 164 9.77 181 9.77 199 9.77 216 9.77 233 9.77 250 9.77 268 9.77 285 9.77 302	9.86 498 9.86 524 9.86 551 9.86 577 9.86 603 9.86 630 9.86 656 9.86 683	0.13 502 0.13 476 0.13 449 0.13 423 0.13 397 0.13 370 0.13 344	9,90 667 9,90 657 9,90 648 9,90 639 9,90 630 9,90 620	46 45 44 43 42
15 16 17 18 19 20 21	9.77 181 9.77 199 9.77 216 9.77 233 9.77 250 9.77 268 9.77 285 9.77 302	9.86 524 9.86 551 9.86 577 9.86 603 9.86 630 9.86 656 9.86 683	0.13 476 0.13 449 0.13 423 0.13 397 0.13 370 0.13 344	9.90 657 9.90 648 9.90 639 9.90 630 9.90 620	45 44 43 42
16 17 18 19 20 21	9.77 199 9.77 216 9.77 233 9.77 250 9.77 268 9.77 285 9.77 302	9.86 551 9.86 577 9.86 603 9.86 630 9.86 656 9.86 683	0.13 449 0.13 423 0.13 397 0.13 370 0.13 344	9.90 648 9.90 639 9.90 630 9.90 620	44 43 42
17 18 19 20 21	9.77 216 9.77 233 9.77 250 9.77 268 9.77 285 9.77 302	9.86 577 9.86 603 9.86 630 9.86 656 9.86 683	$\begin{array}{c} 0.13\ 423 \\ 0.13\ 397 \\ 0.13\ 370 \\ \hline 0.13\ 344 \\ \end{array}$	9.90 639 9.90 630 9.90 620	43 42
18 19 20 21	$\begin{array}{c} 9.77 \ 233 \\ 9.77 \ 250 \\ \hline 9.77 \ 268 \\ \hline 9.77 \ 285 \\ 9.77 \ 302 \\ \end{array}$	9.86 603 9.86 630 9.86 656 9.86 683	0.13 397 0.13 370 0.13 344	9.90 630 9.90 620	42
19 20 21	9.77 250 9.77 268 9.77 285 9.77 302	9.86 630 9.86 656 9.86 683	0.13 370 0.13 344	9.90 620	
20 21	9.77 268 9.77 285 9.77 302	9.86 656 9.86 683	0.13 344		
	9.77 285 9.77 302		0.19.917		40
		9.86.709	116 61.0	9,90 602	39
22	$9.77 \ 319$	17.00 100	0.13 291	9.90 592	38
23		9.86 736	$0.13\ 264$	9,90 583	37
24	9.77 336	$9.86\ 762$	0.13 238	9.90 574	36
25	9.77 353	9.86 789	0.13 211	9.90 565	35
$\frac{26}{27}$	9.77 370 9.77 387	9.86 815 9.86 842	$0.13\ 185$ $0.13\ 158$	9.90 555 9.90 546	34 33
28	9.77 405	9.86 868	0.13 133	9.90 537	32
29	9.77 422	9.86 894	0.13 106	9.90 527	31
30	9.77 439	9.86 921	0.13 079	9.90 518	30
31	9.77 456	9.86 947	0.13 053	9,90 509	29
32	9.77 473	9.86 974	0.13 026	9.90 499	28
33	9.77 490	9.87 000	0.13 000	9,99 490	27
34	9.77 507	$9.87\ 027$	0.12973	9.90 480	26
35	9.77 524	9.87 053	0.12 947 0.12 921	9.90 471	25
36 37	9.77 541 9.77 558	9.87 079 9.87 106	0.12921 0.12894	9,90 462 9,90 452	24 23
38	9.77 575	9.87 132	0.12 868	9.90 443	22
39	9.77 592	9.87 158	0.12 842	9.90 434	21
40	9.77 609	9.87 185	0.12 815	9,90 424	20
41	9.77 626	9.87 211	0.12 789	9,90 415	19
42	9.77 643	9.87 238	0.12762	9.90 405	18
43	9.77 660	9.87 264	0.12736	9.90 396	17
44	9.77 677	9.87 200	0.12 710	9.90 386	16
45	9.77 694	9.87 317	0.12 683	9.90 377	15 14
46 47	$\begin{array}{c c} 9.77 & 711 \\ 9.77 & 728 \end{array}$	9.87 343 9.87 369	$0.12\ 657$ $0.12\ 631$	9,90 368 9,90 358	13
48	9.77 744	9.87 396	0.12 604	9,90 349	12
49	9.77 761	9.87 422	0.12 578	9.90 339	11
50	9.77 778	9.87 448	0.12 552	9.90 330	10
51	9.77 795	9.87 475	0.12 525	9.90 320	9
52	9.77 812	9.87 501	0.12 499	9.90 311	8
53	9.77 829	- 9.87 527	0.12 473	9.90 301	7
54	9.77 846	9.87 554	0.12 446	9,90 292	6
55 56	9.77 862 9.77 879	9,87 580 9,87 606	$0.12\ 420$ $0.12\ 394$	9.90 282 9.90 273	5 4
57	9.77 896	9.87 633	0.12 367	9.90 263	3
58	9.77 913	9.87 659	0.12 341	9.90 254	2
59	9.77 930	9.87 685	0.12 315	9.90 244	1
60	9.77 946	9.87 711	0.12 289	9.90 235	0
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	,

T .	L. Sin.	L. Tan.	L. Cot.	L. Cos.	
				9.90 235	CO
0	9.77 946	9.87 711	0.12 289		60
$\frac{1}{2}$	9.77 963 9.77 980	9.87 738 9.87 764	$0.12\ 262 \\ 0.12\ 236$	9.90 225 9.90 216	59 58
3	9.77 997	9.87 790	0.12 210	9.90 206	57
4	9.78013	9.87 817	0.12 183	9.90 197	56
5	9.78 030	9.87 843	0.12 157	9.90 187	55
6	$9.78\ 047$ $9.78\ 063$	9.87 869 9.87 895	$0.12\ 131 \\ 0.12\ 105$	9.90 178 9.90 168	54 53
8	9.78 080	9.87 922	0.12 103	9.90 159	52
9	9.78 097	9.87 948	$0.12 \ 052$	9.90 149	51
10	9.78 113	9.87 974	0.12 026	9.90 139	50
11	9.78 130	9.88 000	0.12 000	9.90 130	49
12	9.78 147	9.88 027	0.11 973	9.90 120	48
13 14	9.78 163 9.78 180	$9.88\ 053$ $9.88\ 079$	$0.11947 \\ 0.11921$	9.90 111 9.90 101	$\frac{47}{46}$
15	9.78 197	9.88 105	0.11 895	9.90 091	45
16	$9.78\ 213$	9.88 131	0.11 869	9.90 082	44
17	9.78 230	9.88 158	0.11 842	9.90 072	43
18 19	9.78 246 9.78 263	9.88 184 9.88 210	$0.11816 \\ 0.11790$	9.90 063 9.90 053	42 41
20	9.78 280	9.88 236	0.11 764	9.90 043	40
21	9.78 296	9.88 262	0.11 738	9.90 034	39
$\frac{21}{22}$	9.78 313	9.88 289	0.11 711	9.90 024	38
23	$9.78 \ 329$	$9.8831\overline{5}$	0.11 685	9.90 014	37
24	9.78 346	9.88 341	0.11 659	9.90 005	36
25 26	9.78 362 9.78 379	9.88 367 9.88 393	$0.11\ 633 \ 0.11\ 607$	9.89 995 9.89 985	35 34
$\frac{20}{27}$	9.78 395	9.88 420	0.11 580	9.89 976	33
28	9.78 412	9.88 446	$0.11\ 554$	9.89 966	32
29	9.78 428	9.88 472	0.11 528	9.89 956	31
30	9.78 445	9.88 498	0.11 502	9.89 947	30
31	9.78 461	9.88 524	0.11 476	9.89 937	29
32	9.78 478 9.78 494	9.88 550 9.88 577	$0.11450 \\ 0.11423$	9.89 927 9.89 918	$\frac{28}{27}$
$\frac{33}{34}$	9.78 510	9.88 603	0.11 397	9.89 908	26
35	$9.78\ 527$	9.88 629	0.11 371	9.89 898	25
36	9.78 543	9.88 655	0.11 345 0.11 319	9.89 888	24
$\frac{37}{38}$	9.78 560 9.78 576	9.88 681 9.88 707	0.11 519 0.11 293	9.89 879 9.89 869	$\frac{23}{22}$
39	9.78 592	9.88 733	0.11 267	9.89 859	$\tilde{2}\tilde{1}$
40	9.78 609	9.88 759	0.11 241	9.89 849	20
41	9.78 625	9.88 786	0.11 214	9.89 840	19
42	$9.78\ 642$	9.88 812	0.11 188	9.89 830	18
43 44	9.78 658 9.78 674	9.88 838 9.88 864	0.11 162	9.89 820 9.89 810	17
$\frac{44}{45}$	9.78 691	9.88 890	0.11 136 0.11 110	9.89 801	16 15
46	9.78 707	9.88 916	0.11 084	9.89 791	14
47	9.78 723	9.88 942	0.11 058	9.89 781	13
48 49	9.78 739 9.78 756	9.88 968 9.88 994	$0.11\ 032 \\ 0.11\ 006$	9.89 771 9.89 761	12 11
50	$\frac{9.78730}{9.78772}$	9.88 994	0.11 000	9.89 752	10
50 51	$\frac{9.18112}{9.78788}$	9.89 046	0.10 954	$\frac{9.89732}{9.89742}$	9
52	9.78 805	9.89 073	0.10 934	9.89 732	8
53	9.78821	9.89 099	0.10 901	9.89722	7
54	9.78 837	9.89 125	0.10 875	9.89 712	6
55 56	9.78853 9.78869	9.89 151 9.89 177	$0.10849 \\ 0.10823$	9.89 702 9.89 693	5 4
57	9.78 886	9.89 203	0.19823 0.10797	9.89 683	3
58	9.78 902	9,89 229	0.10 771	9.89673	2
59	9.78 918	9.89 255	0.10 745	9.89 663	1
60	9.78 934	9.89 281	0.10 719	9.89 653	0
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	,

, ,	L. Sin.	L. Tan.	L. Cot.	L. Cos.	
\vdash		9.89 281		9.89 653	60
0	9.78 934		0.10 719		60
1 2	9.78 950 9.78 967	9.89 307 9.89 333	0.10693 0.10667	9.89 643 9.89 633	59 58
3	9.78 983	9,89 359	0.10 641	9.89 624	57
4	9.78 999	9.89 385	0.10 615	9.89 614	56
5	$9.79\ 015$	9.89 411	$0.10\ 589$	$9.89\ 604$	55
6	9.79 031	9.89 437	0.10 563	$9.89\ 594$	54
7 8	9.79 047	9.89 463	0.10 537	9.89 584	53
9	9.79 063 9.79 079	9.89 489 9.89 515	$0.10\ 511$ $0.10\ 485$	$9.89\ 574$ $9.89\ 564$	$\frac{52}{51}$
10	9.79 095	9.89 541	0.10 459	9.89 554	50
11	9.79 111	9.89 567	0.10 433	9,89 544	49
12	9.79 128	9.89 593	0.10 407	9.89 534	48
13	9.79 144	9.89 619	0.10 381	9.89524	47
14	$9.79\ 160$	9.89 645	$0.10\ 355$	9.89 514	46
15	9.79 176	9.89 671	0.10 329	9.89 504	45
16	9.79 192 9.79 208	9.89 697 9.89 723	$0.10 \ 303$ $0.10 \ 277$	9.89 495 0.80 488	44
17 18	9.79 224	9.89 749	0.10 251	$9.89485 \\ 9.89475$	$\frac{43}{42}$
19	9.79 240	9.89 775	0.10 225	9.89 465	41
20	9.79 256	9.89 801	0.10 199	9,89 455	40
21	9.79 272	9.89 827	0.10 173	9.89 445	39
22	9.79 288	9.89 853	0.10 147	9.89 435	38
23	$9.79\ 304$	9.89 879	0.10 121	9.89425	37
24	9.79.319	9.89 905	0.10095	$9.8941\overline{5}$	36
25	9.79 335	9.89 931	0.10 069	9.89 405	35
26 27	9.79 351	9.89 957	0.10 043	9.89 395 9.89 385	34
28	9.79 367 9.79 383	9.89 983	$0.10\ 017 \ 0.09\ 991$	9.89 375	33 32
29	9.79 399	9.90 035	0.09 965	9.89 364	31
30	9.79 415	9.90 061	0.09 939	9.89 354	30
31	9,79 431	9.90 086	0.09 914	9.89 344	29
32	9.79 447	9.90 112	0.09 888	9.89 334	28
33	$9.79\ 463$	9.90 138	0.09 862	9.89 324	27
34	9.79 478	9.90 164	0.09 836	9.89 314	26
35	9.79 494	9.90 190	0.09 810	9,89 304	25
36	9.79 510	9.90 216	0.09 784	9.89 294	24
37 38	$9.79\ 526$ $9.79\ 542$	9.90 242 9.90 268	$0.09758 \\ 0.09732$	9.89 284 9.89 274	23 22
39	9.79 558	9.90 294	0.09 706	9.89 204	21
40	9,79 573	9.90 320	0.09 680	9.89 254	20
41	9.79 589	9.90 346	0.09 654	9.89 244	19
42	9.79 605	9.90 371	0.09 629	9.89 233	18
43	$9.79\ 621$	9,90 397	0.09 603	9.89 223	17
44	-9.79.636	9,90 423	0.09 577	9.89 213	16
45	9.79 652	9.90 449	0.09 551	9.89 203	15
46	9,79 668	9.90 475	0.09 525	9.89 193	14
47 48	9.79 684 9.79 699	9.90 501 -	0.09 499 0.09 473	9.89 183 9.89 173	13 12
49	9.79 715	9.90 553	0.09 447	9.89 162	11
50	9.79 731	9.90 578	0.09 422	9.89 152	10
51	9.79.746	9.90 604	0.09 396	9.89 142	9
52	9.79 762	9.90 630	0.09 370	9,89 132	8
53	9.79 778	9,90-656	0.09.344	9.89 122	7
54	9.79 793	9,90 682	0.09 318	9.89 112	6
55	9.79 809	9.90 708	0.09 292	9,89 101	5
56	9,79 825	9.90 731	0.09 266	9,89 091	4 3
57 58	9.79 840 9.79 856	9.90 759 9.90 785	0.09 241 0.09 215	9.89 081 9.89 071	$\frac{3}{2}$
59	9.79 872	9.90 811	0.09 189	9,89 060	1
60	9.79 887	9.90 837	0.09 163	9.89 050	ô
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	,
	L. 00s.		10	L. 3111.	<u> </u>

,	L. Sin.	L. Tan.	L. Cot.	L. Cos.			
0	9.79 887	9,90 837	0.09 163	9.89 050	60		
1	9.79 903	9.90 863	0.09 137 0.09 111	9.89 040 9.89 030	59 58		
$\frac{2}{3}$	9.79 918 9.79 934	9,90 889 9,90 914	0.09 111	9.89 020	57		
4	9.79 950	9,90 940	0.09 060	9.89 009	56		
5	9.79 965	9.90 966	0.09 034	9.88 999	55		
6	9.79 981	9.90 992 9.91 018	$0.09008 \\ 0.08982$	9.88 989 9.88 978	54 53		
7 8	9.79 996 9.80 012	9.91 018	0.08 982 0.08 957	9.88 968	52		
9	9.80 027	9.91 069	0.08 931	9.88 958	51		
10	9.80 043	9.91 095	0.08 905	9.88 948	50		
11	9.80 058	9.91 121	0,08 879	9.88 937	49		
12	9.80 074	9.91 147	0.08 853	9.88 927	48		
13 14	$9.80\ 089$ $9.80\ 10\overline{5}$	9.91 172 9.91 198	0.08 828 0.08 802	9.88 917 9.88 906	$\frac{47}{46}$		
15	9.80 120	9.91 224	0.08 776	9.88 896	45		
16	$9.80\ 136$	$9.91 \ 250$	0.08 750	9.88886	44		
17	9.80 151	9.91 276	0.08 724	9.88 875	43		
18 19	$9.80\ 166$ $9.80\ 182$	9.91 301 9.91 327	$0.08699 \\ 0.08673$	$9.88\ 865$ $9.88\ 855$	42 41		
20	9.80 197	9.91 353	0.08 647	9.88 844	40		
21	$\frac{-3.80137}{9.80213}$	9.91 379	0.08 621	9.88 834	39		
22	$9.80\ 228$	9.91 404	0.08 596	9.88824	38		
23	$9.80\ 244$	9.91 430	0.08 570	9.88 813	37		
24 25	9.80 259 9.80 274	9.91 456 9.91 482	0.08 544	9.88 803	36 35		
$\frac{25}{26}$	9.80 214	9.91 507	$0.08\ 518$ $0.08\ 493$	9.88 793 9.88 782	34		
27	9.80 305	9.91 533	0.08 467	9.88 772	33		
28	9.80 320	9.91 559	0.08 441	9.88761	32		
29	9.80 336	9.91 585	0.08 415	9.88 751	31		
30	9.80 351	9.91 610,	0.08 390	9.88 741	30		
$\frac{31}{32}$	9.80 366 9.80 382	9.91 636 9.91 662	$0.08\ 364$ $0.08\ 338$	$9.88730 \\ 9.88720$	29 28		
33	9.80 397	9.91 688	0.08 312	9.88 709	$\frac{20}{27}$		
34	9!80 412	9.91 713	$0.08\ 287$	9.88 699	26		
35	9.80 428	9.91 739	0.08 261	9.88 688	$\frac{25}{24}$		
36 37	9.80 443 9.80 458	$9.91\ 76\overline{5}$ $9.91\ 791$	$0.08\ 235$ $0.08\ 209$	9.88 678 9.88 668	$\frac{24}{23}$		
38	9.80 473	9.91 816	0.08 184	9.88657	22		
- 39	9.80 489	9.91 842	0.08 158	9.88 647	21		
40	9.80 504	9.91 868	0.08 132	9.88 636	20		
41	9.80 519	9.91 893	0.08 107	9.88 626	19		
42 43	9,80 534 9,80 550	9.91 919 9.91 945	$0.08081 \\ 0.08055$	9.88615 9.88605	18 17		
44	$9.80\ 565$	9.91 971	0.08 029	9.88 594	16		
45	$9.80\ 580$	9.91 996	0.08 004	9.88584	15		
46	9.80 595	9.92 022	0.07 978	9.88 573	14 13		
$\begin{array}{c} 47 \\ 48 \end{array}$	9.80 610 9.80 625	9.92 048 9.92 073	0.07952 0.07927	$9.88\ 563$ $9.88\ 552$	13 12		
49	9.80 641	9.92 099	0.07 901	$9.88\ 542$	11		
50	9.80 656	$9.92\ 125$	0.07 875	9.88 531	10		
51	9.80 671	9.92 150	0.07 850	9.88 521	9		
52	9.80 686	9.92 176	0.07 824	9.88 510	8 7		
53 54	$9.80\ 701$ $9.80\ 716$	9.92 202 9.92 227	$0.07798 \ 0.07773$	9.88 499 9.88 489	6		
55	9.80731	$9.92\ 253$	0.07 747	9.88 478	5		
56	9.80 746	$9.92\ 279$	0.07 721	9.88 468	4		
57 58	9.80 762 9.80 777	9.92 304 9.92 330	0.07 696	9.88 457 9.88 447	$\frac{3}{2}$		
58 59	9.80 792	9.92 356	0.07 644	9.88 436	1		
60	9.80 807	9.92 381	0.07 619	9.88 425	0		
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	P		
10.75		the state of		-			

40									
,	L. Sin.	L. Tan.	L. Cot.	L. Cos.	1				
0	9.80 807	9.92 381	0.07 619	9.88 425	60				
1	9.80 822	9.92 407	0.07 593	9.88 415	59				
2	9.80 837	9.92 433	0.07 567	9.88 404	58				
3	9.80 852 9.80 867	9.92 458 9.92 484	$0.07\ 542$ $0.07\ 516$	9.88 394 9.88 383	57				
$\frac{4}{5}$	9.80 882	9.92 510	0.07 490	9.88 372	56 55				
6	9.80 897	9.92 535	0.07 465	9.88 362	54				
7	$9.80\ 912$	$9.92\ 561$	0.07 439	9.88 351	53				
8	9.80 927	9.92587	0.07 413	9.88 340	52				
9	9.80 942	9.92 612	0.07 388	9.88 330	51				
10	9.80 957	9.92 638	0.07 362	9.88 319	50				
11	9.80 972	9.92 663	0.07 337	9.88 308	49				
12 13	9.80987 9.81002	9.92689 $9.9271\overline{5}$	$0.07\ 311$ $0.07\ 285$	9.88 298 9.88 287	48				
14	9.81 002	9.92 740	$0.07 285 \\ 0.07 260$	9.88 276	47 46				
15	9.81 032	9.92 766	0.07 234	9.88 266	45				
16	9.81 047	9.92 792	0.07 208	9.88 255	44				
17	$9.81\ 061$	9.92 817	0.07 183	9.88 244	43				
18	9.81 076	9.92 843	0.07 157	9.88 234	42				
19	9.81 091	9.92 868	0.07 132	9.88 223	41				
20	9.81 106	9.92 894	0.07 106	9.88 212	40				
21	9.81 121	9.92 920	0.07 080	9.88 201	39				
22 23	9.81 136 9.81 151	9.92 945 9.92 971	$0.07\ 055$ $0.07\ 029$	9.88 191 9.88 180	38 37				
24	9.81 166	9.92 996	0.07 029	9.88 169	36				
25	9.81 180	9.93 022	0.06 978	9.88 158	35				
26	$-9.81\ 195$	9.93 048	0.06952	9.88 148	34				
27	$9.81\ 210$	9.93073	0.06927	9.88 137	33				
28	9.81 225	9.93 099	0.06 901	9.88 126	32				
29	9.81 240	9.93 124	0.06 876	9.88 115	31				
30	9.81 254	9.93 150	0.06 850	9.88 105	30				
31	9.81 269 9.81 284	9.93 175	0.06 825	9.88 094 9.88 083	29 28				
32 33	9.81 284 9.81 299	9.93 201 9.93 227	0.06 799 0.06 773	9.88 072	28 27				
34	9.81 314	9.93 252	0.06 748	9.88 061	26				
35	9.81 328	9.93 278	0.06722	9.88 051	25				
36	9.81 343	9.93 303	0.06 697	9.88 040	24				
37	9.81 358	9.93 329	0.06 671	9.88 029	23 22				
38	$9.81\ 372$ $9.81\ 387$	9.93 354 9.93 380	0.06 646 0.06 620	9.88 018 9.88 007	22				
40	9.81 402	9.93 406	0.06 594	9.87 996	20				
41 42	9.81 417 9.81 431	9.93 431 9.93 457	0.06 569 0.06 543	9.87 985 9.87 975	19 18				
43	9.81 446	9.93 482	0.06 518	9.87 964	17				
44	9.81 461	9,93 508	0.06492	9.87 953	16				
45	$9.81\ 475$	9.93 533	0.06 467	9.87 942	15				
46	9.81 490	9,93 559	0.06 441	9.87 931	14				
47 48	9.81 505 9.81 519	9.93 584 9.93 610	0.06 416 0.06 390	9.87 920 9.87 909	13 12				
49	9.81 534	9.93 636	0.06 364	9.87 898	11				
50	9.81 549	9.93 661	0.06 339	9.87 887	10				
51	9.81 563	9.93 687	0.06 313	9.87 877	9				
52	9.81 578	9.93 712	0.06288	9.87 866	8				
53	9.81 592	9.93 738	0.06 262	9.87 855	7				
54	9.81 607	9.93 763	$0.06\ 237$	9.87 844	6				
55	9.81 622	9.93 789	0.06 211	9.87 833	5				
56 57	9.81 636 9.81 651	9.93 814 9.93 840	0.06 186 0.06 160	9.87 822 9.87 811	4 3				
58	9.81 665	9,93 865	0.06 135	9.87 800	$\frac{3}{2}$				
59	9.81 680	9.93 891	0.06 109	9.87 789	ĩ				
60	9.81 694	9.93 916	0.06 084	9.87 778	0				
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	ř				

Column	TI								
1 9.81 709 9.93 907 0.06 058 9.87 767 59 2 9.81 723 9.93 993 0.06 007 9.87 745 57 4 9.81 767 9.94 041 0.05 982 9.87 734 56 5 9.81 767 9.94 049 0.05 986 9.87 731 56 5 9.81 767 9.94 049 0.05 931 9.87 712 54 6 9.81 816 9.94 105 0.05 905 9.87 761 53 8 9.81 816 9.94 107 0.05 889 9.87 609 52 9 9.81 825 9.94 110 0.05 824 9.87 669 52 10 9.81 885 9.94 117 0.05 803 9.87 657 49 12 9.81 808 9.94 222 0.05 778 9.87 655 40 12 9.81 808 9.94 222 0.05 778 9.87 664 48 13 9.81 826 9.94 273 0.05 777 9.87 624 46 15 9.81 911 9.94 279 0.0		L. Sin.	L. Tan.	L. Cot.	L. Cos.				
2 9.81 723 9.93 967 0.06 033 9.87 756 58 3 9.81 738 9.93 963 0.06 007 9.87 745 57 4 9.81 767 9.94 044 0.05 962 9.87 734 56 5 9.81 767 9.94 045 0.05 965 9.87 723 55 6 9.81 781 9.94 069 0.05 931 9.87 723 55 7 9.81 796 9.94 095 0.05 905 9.87 701 53 8 9.81 810 9.94 120 0.05 880 9.87 690 52 9 9.81 825 9.94 140 0.05 834 9.87 679 51 10 9.81 839 9.94 171 0.05 829 9.87 668 50 11 9.81 838 9.94 127 0.05 803 9.87 665 50 12 9.81 803 9.94 197 0.05 803 9.87 665 50 13 9.81 882 9.94 224 0.05 752 9.87 635 47 14 9.81 897 9.94 273 0.05 727 9.87 635 47 14 9.81 897 9.94 273 0.05 727 9.87 635 47 15 9.81 911 9.94 290 0.05 701 9.87 633 45 16 9.81 926 9.94 324 0.05 676 9.87 601 44 17 9.81 960 9.94 355 0.05 665 9.87 590 43 18 9.81 955 9.94 375 0.05 625 9.87 590 43 18 9.81 963 9.94 426 0.05 574 9.87 557 42 20 9.81 968 9.94 427 0.05 509 9.87 568 41 20 9.81 983 9.94 426 0.05 574 9.87 557 40 21 9.81 908 9.94 452 0.05 446 9.87 551 22 9.82 012 9.94 477 0.05 523 9.87 556 38 23 9.82 026 9.94 529 0.05 446 9.87 551 33 24 9.82 041 9.94 756 0.05 446 9.87 551 33 25 9.82 035 9.94 579 0.05 446 9.87 551 33 26 9.82 069 9.94 579 0.05 446 9.87 551 33 27 9.82 084 9.94 604 0.05 306 9.87 479 33 28 9.82 085 9.94 655 0.05 345 9.87 434 29 9.82 141 9.94 706 0.05 306 9.87 434 29 9.82 155 9.94 534 0.05 665 9.87 490 34 31 9.82 141 9.94 706 0.05 306 9.87 434 29 9.82 155 9.94 635 0.05 315 9.87 436 32 32 9.82 055 9.94 559 0.05 065 9.87 435 21 40 9.82 269 9.94 859 0.05 166 9.87 339 25 33 9.82 169 9.94 757 0.05 268 9.87 434 29 41 9.82 269 9.94 859 0.05 166 9.87 434 29	0			0.06 084		60			
3 9.81 738 9.93 903 0.06 007 9.87 734 57 59.81 767 9.94 044 0.05 956 9.87 723 55 59.81 767 9.94 049 0.05 936 9.87 723 55 57 69 9.81 767 9.94 009 0.05 905 9.87 701 53 8 9.81 810 9.94 120 0.05 880 9.87 690 52 99 9.81 825 9.94 120 0.05 880 9.87 698 52 99 9.81 825 9.94 171 0.05 829 9.87 668 50 11 9.81 839 9.94 171 0.05 803 9.87 668 50 11 9.81 854 9.94 127 0.05 803 9.87 637 49 122 9.81 868 9.94 222 0.05 778 9.87 635 47 49 14 9.81 8069 9.94 273 0.05 752 9.87 635 47 49 14 9.81 8069 9.94 273 0.05 752 9.87 635 47 14 9.81 897 9.94 229 0.05 752 9.87 635 47 14 14 9.81 897 9.94 232 0.05 676 9.87 601 44									
4 9.81 752 9.94 018 0.05 982 9.87 733 55 6 9.81 761 9.94 044 0.05 931 9.87 723 55 7 9.81 796 9.94 005 0.05 905 9.87 701 53 8 9.81 810 9.94 120 0.05 880 9.87 690 52 9 9.81 825 9.94 146 0.05 854 9.87 679 51 10 5.81 833 9.94 171 0.05 803 9.87 637 49 11 9.81 854 9.94 197 0.05 803 9.87 637 49 12 9.81 868 9.94 222 0.05 778 9.87 637 49 13 9.81 868 9.94 222 0.05 778 9.87 636 47 14 9.81 882 9.94 243 0.05 752 9.87 636 47 15 9.81 911 9.94 233 0.05 752 9.87 634 46 16 9.81 929 9.94 273 0.05 676 9.87 601 44 17 9.81 939 0.94 375	2								
5 9.81 767 9.94 044 0.05 936 9.87 723 55 6 9.81 781 9.94 069 0.05 931 9.87 701 53 8 9.81 810 9.94 120 0.05 800 9.87 690 52 9 9.81 825 9.94 146 0.05 880 9.87 699 52 10 5.81 830 9.94 171 0.05 803 9.87 668 50 11 9.81 886 9.94 122 0.05 778 9.87 637 49 12 9.81 868 9.94 222 0.05 778 9.87 637 49 12 9.81 886 9.94 223 0.05 752 9.87 635 47 14 9.81 897 9.94 273 0.05 727 9.87 635 47 14 9.81 896 9.94 234 0.05 676 9.87 601 44 17 9.81 926 9.94 235 0.05 676 9.87 601 44 17 9.81 939 9.94 350 0.05 676 9.87 504 38 18 9.81 938 9.94 426 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td></td<>									
6 9.81 781 9.94 005 0.05 931 9.87 701 54 7 9.81 810 9.94 120 0.05 880 9.87 690 52 9 9.81 825 9.94 171 0.05 854 9.87 679 51 10 9.81 839 9.94 171 0.05 803 9.87 668 50 11 9.81 886 9.94 122 0.05 778 9.87 635 49 12 9.81 886 9.94 122 0.05 778 9.87 635 47 12 9.81 886 9.94 123 0.05 772 9.87 635 47 14 9.81 887 9.94 273 0.05 701 9.87 635 47 15 9.81 911 9.94 229 0.05 701 9.87 601 44 16 9.81 926 9.94 355 0.05 676 9.87 601 44 17 9.81 936 9.94 375 0.05 625 9.87 509 43 18 9.81 935 9.94 375 0.05 625 9.87 557 40 20 9.81 983 9.94 452 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td></t<>									
8 9.81 810 9.94 120 0.05 884 9.87 639 52 9 9.81 825 9.94 171 0.05 824 9.87 638 50 11 9.81 834 9.94 171 0.05 829 9.87 636 50 11 9.81 885 9.94 171 0.05 803 9.87 637 49 12 9.81 886 9.94 122 0.05 778 9.87 635 47 13 9.81 887 9.94 273 0.05 727 9.87 635 47 14 9.81 897 9.94 273 0.05 727 9.87 635 47 15 9.81 911 9.94 290 0.05 701 9.87 631 45 16 9.81 940 9.94 324 0.05 676 9.87 500 43 17 9.81 940 9.94 350 0.05 625 9.87 509 43 20 9.81 935 9.94 375 0.05 625 9.87 509 43 20 9.81 938 9.94 426 0.05 574 9.87 557 40 21 9.81 938 9.94 426 <	6								
9 9.81 825 9.94 171 0.05 829 9.87 668 50 11 9.81 839 9.94 177 0.05 803 9.87 657 49 12 9.81 808 9.94 222 0.05 778 9.87 646 48 13 9.81 882 9.94 243 0.05 722 9.87 635 47 14 9.81 897 9.94 273 0.05 727 9.87 613 45 15 9.81 911 9.94 299 0.05 701 9.87 613 45 16 9.81 926 9.94 324 0.05 676 9.87 601 44 17 9.81 940 9.94 350 0.05 650 9.87 590 43 18 9.81 955 9.94 375 0.05 625 9.87 579 42 20 9.81 988 9.94 420 0.05 524 9.87 556 41 20 9.81 988 9.94 452 0.05 523 9.87 557 40 21 9.81 988 9.94 477 0.05 523 9.87 535 38 22 9.82 012 9.94 579									
10									
11 9.81 884 9.94 197 0.05 803 9.87 657 49 12 9.81 808 9.94 222 0.05 778 9.87 635 47 14 9.81 887 9.94 273 0.05 727 9.87 624 46 15 9.81 911 9.94 290 0.05 701 9.87 613 45 16 9.81 940 9.94 350 0.05 676 9.87 590 43 18 9.81 940 9.94 355 0.05 625 9.87 590 43 18 9.81 955 9.94 375 0.05 625 9.87 590 43 19 9.81 969 9.94 401 0.05 599 9.87 594 41 20 9.81 983 9.94 426 0.05 548 9.87 535 38 21 9.81 988 9.94 452 0.05 548 9.87 535 38 22 9.82 012 9.94 503 0.05 497 9.87 535 38 23 9.82 035 9.94 503 0.05 422 9.87 501 35 24 9.82 041 9.94 526									
12 9.81 868 9.94 222 0.05 778 9.87 646 48 13 9.81 887 9.94 273 0.05 727 9.87 635 47 15 9.81 911 9.94 299 0.05 701 9.87 613 45 16 9.81 926 9.94 324 0.05 676 9.87 601 44 17 9.81 905 9.94 350 0.05 625 9.87 579 42 19 9.81 905 9.94 401 0.05 599 9.87 568 41 20 9.81 969 9.94 401 0.05 599 9.87 568 41 20 9.81 988 9.94 426 0.05 574 9.87 557 40 21 9.81 998 9.94 452 0.05 548 9.87 555 38 21 9.81 998 9.94 457 0.05 548 9.87 546 39 22 9.82 012 9.94 477 0.05 523 9.87 534 37 23 9.82 036 9.94 503 0.05 406 9.87 524 37 24 9.82 041 9.94 529	1								
13 9.81 882 9.94 273 0.05 772 9.87 635 47 14 9.81 897 9.94 273 0.05 701 9.87 624 46 15 9.81 916 9.94 229 0.05 701 9.87 601 44 16 9.81 926 9.94 320 0.05 650 9.87 601 44 17 9.81 940 9.94 350 0.05 650 9.87 590 43 18 9.81 940 9.94 375 0.05 625 9.87 590 43 19 9.81 969 9.94 401 0.05 539 9.87 548 41 20 9.81 988 9.94 426 0.05 548 9.87 546 39 21 9.81 998 9.94 426 0.05 548 9.87 546 39 22 9.82 012 9.94 477 0.05 523 9.87 535 38 23 9.82 026 9.94 503 0.05 477 9.87 524 37 24 9.82 041 9.94 528 0.95 472 9.87 513 36 25 9.82 089 9.94 559									
15		9.81~882	9.94 248	0.05 752	$9.87\ 63\overline{5}$	47			
16 9.81 926 9.94 324 0.05 676 9.87 601 44 17 9.81 940 9.94 350 0.05 625 9.87 590 43 18 9.81 965 9.94 401 0.05 599 9.87 568 41 20 9.81 983 9.94 426 0.05 599 9.87 568 41 20 9.81 983 9.94 452 0.05 548 9.87 546 39 21 9.81 988 9.94 477 0.05 523 9.87 535 38 22 9.82 012 9.94 477 0.05 523 9.87 535 38 23 9.82 026 9.94 530 0.05 407 9.87 524 37 24 9.82 041 9.94 528 0.95 472 9.87 513 36 25 9.82 055 9.94 579 0.05 446 9.87 501 35 26 9.82 069 9.94 579 0.05 421 9.87 449 34 27 9.82 084 9.94 604 0.05 306 9.87 479 33 28 9.82 098 9.94 630									
17 9.81 940 9.94 350 0.05 625 9.87 579 42 19 9.81 969 9.94 401 0.05 590 9.87 568 41 20 9.81 983 9.94 426 0.05 574 9.87 568 41 20 9.81 988 9.94 452 0.05 548 9.87 546 39 21 9.81 998 9.94 452 0.05 548 9.87 546 39 22 9.82 012 9.94 477 0.05 523 9.87 535 38 23 9.82 041 9.94 528 0.95 472 9.87 513 36 24 9.82 041 9.94 528 0.95 472 9.87 501 35 26 9.82 055 9.94 579 0.05 421 9.87 490 34 27 9.82 084 9.94 604 0.05 306 9.87 459 33 28 9.82 098 9.94 630 0.05 370 9.87 468 32 29 9.82 112 9.94 651 0.05 345 9.87 457 31 30 9.82 126 9.94 681									
18 9.81 965 9.94 401 0.05 590 9.87 578 42 20 9.81 969 9.94 401 0.05 590 9.87 568 41 20 9.81 983 9.94 426 0.05 574 9.87 557 40 21 9.81 998 9.94 452 0.05 548 9.87 546 39 22 9.82 012 9.94 477 0.05 523 9.87 535 38 23 9.82 026 9.94 503 0.05 407 9.87 524 37 24 9.82 055 9.94 528 0.95 472 9.87 501 35 26 9.82 060 9.94 579 0.05 446 9.87 501 35 26 9.82 084 9.94 604 0.05 306 9.87 479 33 28 9.82 098 9.94 630 0.05 370 9.87 468 32 29 9.82 112 9.94 655 0.05 319 9.87 434 29 30 9.82 126 9.94 630 0.05 319 9.87 434 29 31 9.82 166 9.94 732									
20 9.81 983 9.94 426 0.05 574 9.87 557 40 21 9.81 998 9.94 452 0.05 548 9.87 546 39 22 9.82 012 9.94 477 0.05 523 9.87 535 38 23 9.82 026 9.94 503 0.05 497 9.87 524 37 24 9.82 041 9.94 528 0.95 472 9.87 513 36 25 9.82 055 9.94 554 0.05 446 9.87 501 35 26 9.82 069 9.94 679 0.05 421 9.87 490 34 27 9.82 084 9.94 604 0.05 306 9.87 479 33 28 9.82 098 9.94 630 0.05 370 9.87 468 32 29 9.82 112 9.94 681 0.05 319 9.87 446 30 31 9.82 166 9.94 681 0.05 294 9.87 434 29 32 9.82 155 9.94 787 0.05 208 9.87 423 28 33 9.82 169 9.94 785									
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	19	9.81 969	9.94 401	0.05 599	9.87 568				
$\begin{array}{c} 22\\ 23\\ 9.82\ 026\\ 9.94\ 503\\ 0.95\ 477\\ 24, 9.82\ 041\\ 9.94\ 528\\ 0.95\ 477\\ 0.05\ 477\\ 9.87\ 524\\ 37\\ 24, 9.82\ 055\\ 9.94\ 558\\ 0.95\ 472\\ 9.87\ 513\\ 36\\ 25\\ 9.82\ 055\\ 9.94\ 554\\ 0.05\ 446\\ 9.87\ 501\\ 35\\ 26\\ 9.82\ 055\\ 9.94\ 554\\ 0.05\ 446\\ 9.87\ 501\\ 35\\ 26\\ 9.82\ 068\\ 9.94\ 579\\ 0.05\ 421\\ 9.87\ 400\\ 34\\ 27\\ 9.82\ 088\\ 9.94\ 604\\ 0.05\ 370\\ 0.05\ 370\\ 9.87\ 479\\ 33\\ 28\\ 9.82\ 098\\ 9.94\ 630\\ 0.05\ 370\\ 0.05\ 370\\ 9.87\ 479\\ 33\\ 29\\ 9.82\ 112\\ 9.94\ 655\\ 0.05\ 345\\ 9.87\ 457\\ 31\\ 30\\ 9.82\ 126\\ 9.94\ 631\\ 0.05\ 310\\ 9.87\ 446\\ 30\\ 31\\ 9.82\ 126\\ 9.94\ 631\\ 0.05\ 319\\ 9.87\ 446\\ 30\\ 31\\ 9.82\ 155\\ 9.94\ 732\\ 0.05\ 268\\ 9.87\ 423\\ 28\\ 33\\ 9.82\ 169\\ 9.94\ 757\\ 0.05\ 243\\ 9.87\ 423\\ 28\\ 33\\ 9.82\ 169\\ 9.94\ 757\\ 0.05\ 243\\ 9.87\ 412\\ 27\\ 34\\ 9.82\ 188\\ 9.94\ 808\\ 0.05\ 192\\ 9.87\ 390\\ 25\\ 36\\ 9.82\ 212\\ 9.94\ 834\\ 0.05\ 166\\ 9.87\ 378\\ 24\\ 37\\ 9.82\ 226\\ 9.94\ 859\\ 0.05\ 116\\ 9.87\ 356\\ 22\\ 39\\ 9.82\ 226\\ 9.94\ 859\\ 0.05\ 106\\ 9.87\ 356\\ 22\\ 39\\ 9.82\ 226\\ 9.94\ 859\\ 0.05\ 106\\ 9.87\ 356\\ 22\\ 40\\ 9.82\ 257\\ 9.94\ 986\\ 0.05\ 015\\ 9.87\ 334\\ 20\\ 41\\ 9.82\ 269\\ 9.94\ 986\\ 0.05\ 015\\ 9.87\ 345\\ 21\\ 40\\ 9.82\ 231\\ 9.94\ 986\\ 0.05\ 015\\ 9.87\ 334\\ 20\\ 41\\ 9.82\ 231\\ 9.94\ 986\\ 0.05\ 015\\ 9.87\ 334\\ 20\\ 41\\ 9.82\ 236\\ 9.95\ 503\\ 0.04\ 861\\ 9.87\ 322\\ 10\\ 9.87\ 322\\ 11\\ 40\\ 9.82\ 354\\ 9.95\ 088\\ 0.04\ 912\\ 9.87\ 300\\ 17\\ 44\\ 9.82\ 326\\ 9.95\ 503\\ 0.04\ 861\\ 9.87\ 322\\ 11\\ 40\\ 9.82\ 354\\ 9.95\ 088\\ 0.04\ 912\\ 9.87\ 266\\ 14\\ 47\\ 9.82\ 368\\ 9.95\ 139\\ 0.04\ 861\\ 9.87\ 322\\ 11\\ 50\\ 9.82\ 439\\ 9.95\ 215\\ 0.04\ 785\\ 9.87\ 255\\ 13\\ 38\\ 9.87\ 277\\ 15\\ 466\\ 9.82\ 439\\ 9.95\ 215\\ 0.04\ 785\\ 9.87\ 209\\ 9.87\ 136\\ 12\\ 9.87\ 198\\ 8\\ 9.82\ 447\\ 9.95\ 215\\ 0.04\ 688\\ 9.87\ 127\\ 15\\ 460\\ 9.82\ 439\\ 9.95\ 215\\ 0.04\ 688\\ 9.87\ 130\\ 9.87\ 141\\ 3\\ 3\\ 8\\ 9.82\ 447\\ 9.95\ 248\\ 9.95\ 348\\ 0.04\ 658\\ 9.87\ 107\\ 10\\ 0.46\ 688\\ 9.87\ 175\\ 6\\ 6\\ 9.82\ 439\\ 9.95\ 348\\ 0.04\ 658\\ 9.87\ 107\\ 10\\ 0.46\ 688\\ 9.87\ 130\\ 2\\ 9.87\ 141\\ 3\\ 3\\ 8\\ 9.82\ 437\\ 9.95\ 248\\ 0.04\ 658\\ 9.87\ 107\\ 10$	20	9.81 983	9.94 426		9.87 557	40			
23 9.82 026 9.94 503 0.05 497 9.87 524 37 24 9.82 041 9.94 528 0.95 472 9.87 513 36 25 9.82 069 9.94 579 0.05 421 9.87 490 34 26 9.82 089 9.94 604 0.05 306 9.87 479 33 28 9.82 098 9.94 630 0.05 370 9.87 468 32 29 9.82 112 9.94 655 0.05 319 9.87 457 31 30 9.82 126 9.94 681 0.05 319 9.87 434 29 31 9.82 141 9.94 706 0.05 294 9.87 434 29 32 9.82 155 9.94 732 0.05 268 9.87 423 28 33 9.82 169 9.94 757 0.05 248 9.87 491 26 34 9.82 184 9.94 838 0.05 192 9.87 390 25 34 9.82 198 9.94 834 0.05 166 9.87 356 23 37 9.82 226 9.94 859									
24. 9.82 041 9.94 528 0.95 472 9.87 513 36 25. 9.82 055 9.94 579 0.05 421 9.87 501 35 26. 9.82 084 9.94 604 0.05 306 9.87 479 33 28. 9.82 084 9.94 630 0.05 370 9.87 468 32 29. 9.82 112 9.94 635 0.05 319 9.87 446 30 31. 9.82 126 9.94 681 0.05 319 9.87 446 30 31. 9.82 141 9.94 706 0.05 294 9.87 434 29 32. 9.82 155 9.94 732 0.05 208 9.87 423 28 33. 9.82 169 9.94 757 0.05 243 9.87 422 28 33. 9.82 184 9.94 830 0.05 106 9.87 390 25 36. 9.82 212 9.94 834 0.05 166 9.87 390 25 36. 9.82 226 9.94 854 0.05 161 9.87 356 22 39. 9.82 255 9.94 935									
25 9.82 059 9.94 559 0.05 421 9.87 490 34 27 9.82 084 9.94 604 0.05 306 9.87 479 33 28 9.82 098 9.94 630 0.05 370 9.87 468 32 29 9.82 112 9.94 655 0.05 345 9.87 457 31 30 9.82 126 9.94 681 0.05 319 9.87 446 30 31 9.82 141 9.94 706 0.05 294 9.87 434 29 32 9.82 155 9.94 732 0.05 208 9.87 423 28 33 9.82 169 9.94 757 0.05 243 9.87 412 28 34 9.82 184 9.94 783 0.05 217 9.87 401 26 35 9.82 198 9.94 808 0.05 192 9.87 390 25 36 9.82 212 9.94 834 0.05 166 9.87 378 23 37 9.82 226 9.94 859 0.05 141 9.87 367 23 38 9.82 240 9.94 850 0.05 116 9.87 356 22 39 9.82 255 9.94 910 0.05 000 9.87 345 21 40 9.82 269 9.94 935 0.05 005 9.87 334 20 41 9.82 283 9.94 961 0.05 003 9.87 322 19 42 9.82 297 9.94 986 0.05 114 9.87 351 21 43 9.82 311 9.95 012 0.04 988 9.87 300 17 44 9.82 354 9.95 037 0.04 903 9.87 322 19 42 9.82 297 9.94 986 0.05 014 9.87 311 18 43 9.82 311 9.95 012 0.04 988 9.87 300 17 44 9.82 354 9.95 088 0.04 912 9.87 366 14 47 9.82 368 9.95 139 0.04 861 9.87 328 16 48 9.82 354 9.95 088 0.04 912 9.87 288 16 49 9.82 368 9.95 139 0.04 861 9.87 266 14 47 9.82 368 9.95 139 0.04 861 9.87 265 13 48 9.82 382 9.95 139 0.04 861 9.87 265 13 48 9.82 382 9.95 139 0.04 861 9.87 265 13 48 9.82 386 9.95 139 0.04 861 9.87 265 13 48 9.82 386 9.95 139 0.04 861 9.87 265 13 48 9.82 386 9.95 139 0.04 861 9.87 265 13 48 9.82 386 9.95 139 0.04 861 9.87 265 13 48 9.82 386 9.95 139 0.04 861 9.87 265 13 48 9.82 386 9.95 139 0.04 861 9.87 265 13 50 9.82 409 9.95 215 0.04 785 9.87 209 9.87 175 65 50 9.82 439 9.95 240 0.04 760 9.87 198 8 51 9.82 439 9.95 240 0.04 760 9.87 198 8 53 9.82 453 9.95 236 0.04 734 9.87 187 7 54 9.82 459 9.95 317 0.04 683 9.87 164 5 56 9.82 495 9.95 393 0.04 607 9.87 130 2 59 9.82 537 9.95 344 0.04 556 9.87 107 0									
26 9.82 069 9.94 579 0.05 421 9.87 490 34 27 9.82 084 9.94 604 0.05 306 9.87 479 33 28 9.82 098 9.94 655 0.05 370 9.87 457 31 30 9.82 126 9.94 681 0.05 319 9.87 446 30 31 9.82 141 9.94 706 0.05 294 9.87 434 29 32 9.82 155 9.94 732 0.05 268 9.87 423 28 33 9.82 169 9.94 757 0.05 243 9.87 491 227 34 9.82 184 9.94 783 0.05 217 9.87 401 26 35 9.82 198 9.94 808 0.05 192 9.87 390 25 36 9.82 212 9.94 834 0.05 166 9.87 356 23 37 9.82 226 9.94 884 0.05 116 9.87 356 22 39 9.82 255 9.94 910 0.05 005 9.87 334 20 41 9.82 283 9.94 961	25								
28 9.82 098 9.94 630 0.05 345 9.87 468 32 29 9.82 126 9.94 655 0.05 345 9.87 457 31 30 9.82 126 9.94 651 0.05 319 9.87 446 30 31 9.82 155 9.94 706 0.05 294 9.87 434 29 32 9.82 155 9.94 732 0.05 268 9.87 423 28 33 9.82 169 9.94 757 0.05 243 9.87 412 26 35 9.82 198 9.94 808 0.05 192 9.87 390 25 36 9.82 212 9.94 834 0.05 166 9.87 376 23 36 9.82 226 9.94 859 0.05 141 9.87 367 23 38 9.82 240 9.94 884 0.05 116 9.87 356 22 39 9.82 255 9.94 935 0.05 065 9.87 334 20 41 9.82 269 9.94 935 0.05 065 9.87 334 20 42 9.82 297 9.94 986	26	$9.82\ 069$				34			
29 9.82 112 9.94 655 0.05 345 9.87 457 31 30 9.82 126 9.94 681 0.05 319 9.87 446 30 31 9.82 141 9.94 706 0.05 294 9.87 434 29 32 9.82 155 9.94 732 0.05 268 9.87 423 28 33 9.82 169 9.94 757 0.05 243 9.87 401 26 34 9.82 184 9.94 783 0.05 217 9.87 401 26 35 9.82 198 9.94 808 0.05 192 9.87 390 25 36 9.82 212 9.94 834 0.05 166 9.87 356 23 37 9.82 226 9.94 884 0.05 116 9.87 356 22 39 9.82 255 9.94 910 0.05 005 9.87 354 21 40 9.82 269 9.94 935 0.05 005 9.87 334 20 41 9.82 283 9.94 901 0.05 005 9.87 332 19 42 9.82 297 9.94 986	27								
30 9.82 126 9.94 681 0.05 319 9.87 446 30 31 9.82 141 9.94 706 0.05 294 9.87 434 29 32 9.82 155 9.94 732 0.05 208 9.87 423 28 33 9.82 169 9.94 757 0.05 243 9.87 401 26 34 9.82 184 9.94 783 0.05 217 9.87 401 26 35 9.82 198 9.94 808 0.05 166 9.87 378 24 37 9.82 226 9.94 850 0.05 141 9.87 367 23 38 9.82 226 9.94 850 0.05 141 9.87 366 22 39 9.82 255 9.94 910 0.05 005 9.87 335 21 40 9.82 255 9.94 910 0.05 009 9.87 335 21 41 9.82 283 9.94 961 0.05 039 9.87 332 19 42 9.82 283 9.94 961 0.05 039 9.87 311 18 43 9.82 311 9.95 042									
$\begin{array}{c} 31 \\ 32 \\ 9.82 \\ 155 \\ 9.94 \\ 732 \\ 0.05 \\ 208 \\ 9.87 \\ 423 \\ 28 \\ 33 \\ 9.82 \\ 169 \\ 9.94 \\ 757 \\ 0.05 \\ 243 \\ 9.87 \\ 423 \\ 28 \\ 9.87 \\ 423 \\ 28 \\ 9.87 \\ 423 \\ 28 \\ 9.87 \\ 423 \\ 28 \\ 9.87 \\ 421 \\ 29 \\ 9.82 \\ 198 \\ 9.94 \\ 838 \\ 9.94 \\ 838 \\ 9.82 \\ 198 \\ 9.94 \\ 838 \\ 9.82 \\ 212 \\ 9.94 \\ 834 \\ 0.05 \\ 166 \\ 9.87 \\ 378 \\ 9.82 \\ 212 \\ 9.94 \\ 834 \\ 0.05 \\ 166 \\ 9.87 \\ 378 \\ 236 \\ 38 \\ 9.82 \\ 226 \\ 9.94 \\ 834 \\ 0.05 \\ 166 \\ 9.87 \\ 378 \\ 237 \\ 9.82 \\ 240 \\ 9.94 \\ 834 \\ 0.05 \\ 116 \\ 9.87 \\ 367 \\ 23 \\ 38 \\ 9.82 \\ 240 \\ 9.94 \\ 835 \\ 9.94 \\ 935 \\ 9.94 \\ 935 \\ 0.05 \\ 0.$									
32 9.82 155 9.94 732 0.05 268 9.87 423 28 33 9.82 169 9.94 757 0.05 243 9.87 412 27 34 9.82 184 9.94 783 0.05 217 9.87 490 25 35 9.82 198 9.94 808 0.05 192 9.87 390 25 36 9.82 212 9.94 834 0.05 166 9.87 376 23 38 9.82 240 9.94 884 0.05 116 9.87 356 22 39 9.82 255 9.94 910 0.05 000 9.87 345 21 40 9.82 269 9.94 935 0.05 065 9.87 334 20 41 9.82 283 9.94 961 0.05 039 9.87 322 19 42 9.82 297 9.94 986 0.05 014 9.87 311 18 43 9.82 311 9.95 062 0.04 988 9.87 300 17 44 9.82 340 9.95 062 0.04 938 9.87 288 16 45 9.82 340 9.95 088									
33 9.82 169 9.94 757 0.05 243 9.87 412 27 34 9.82 184 9.94 783 0.05 217 9.87 401 26 35 9.82 198 9.94 808 0.05 192 9.87 390 25 36 9.82 212 9.94 834 0.05 166 9.87 378 24 37 9.82 226 9.94 859 0.05 141 9.87 367 23 38 9.82 255 9.94 910 0.05 090 9.87 345 21 40 9.82 269 9.94 935 0.05 090 9.87 334 20 41 9.82 283 9.94 935 0.05 005 9.87 322 19 42 9.82 297 9.94 986 0.05 014 9.87 382 19 43 9.82 311 9.95 012 0.04 908 9.87 300 17 44 9.82 326 9.95 037 0.04 903 9.87 288 16 45 9.82 354 9.95 062 0.04 938 9.87 255 13 46 9.82 354 9.95 113						28			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			9.94 757		9.87 412	27			
36 9.82 212 9.94 834 0.05 146 9.87 378 24 37 9.82 226 9.94 859 0.05 141 9.87 367 23 38 9.82 240 9.94 884 0.05 116 9.87 365 22 39 9.82 255 9.94 910 0.05 090 9.87 345 21 40 9.82 269 9.94 935 0.05 065 9.87 334 20 41 9.82 283 9.94 961 0.05 039 9.87 322 19 42 9.82 297 9.94 986 0.05 014 9.87 311 18 43 9.82 311 9.95 012 0.04 988 9.87 300 17 44 9.82 326 9.95 037 0.04 903 9.87 288 16 45 9.82 340 9.95 082 0.04 938 9.87 277 15 46 9.82 368 9.95 113 0.04 887 9.87 255 13 48 9.82 382 9.95 139 0.04 861 9.87 243 12 49 9.82 386 9.95 140			9.94 783			-26			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$									
38 9.82 240 9.94 884 0.05 116 9.87 356 22 39 9.82 255 9.94 910 0.05 005 9.87 345 21 40 9.82 269 9.94 935 0.05 065 9.87 334 20 41 9.82 283 9.94 961 0.05 039 9.87 322 19 42 9.82 297 9.94 986 0.05 014 9.87 311 18 43 9.82 311 9.95 012 0.04 908 9.87 300 17 44 9.82 326 9.95 037 0.04 903 9.87 288 16 45 9.82 340 9.95 062 0.04 938 9.87 277 15 46 9.82 354 9.95 088 0.04 912 9.87 266 14 47 9.82 368 9.95 113 0.04 887 9.87 255 13 48 9.82 396 9.95 139 0.04 861 9.87 232 11 50 9.82 410 9.95 190 0.04 870 9.87 232 11 51 9.82 439 9.95 215									
40 9.82 269 9.94 935 0.05 065 9.87 334 20 41 9.82 283 9.94 961 0.05 039 9.87 322 19 42 9.82 297 9.94 986 0.05 014 9.87 301 18 43 9.82 311 9.95 012 0.04 988 9.87 300 17 44 9.82 326 9.95 037 0.04 963 9.87 288 16 45 9.82 340 9.95 062 0.04 938 9.87 277 15 46 9.82 354 9.95 088 0.04 912 9.87 266 14 47 9.82 368 9.95 113 0.04 867 9.87 255 13 48 9.82 382 9.95 164 0.04 861 9.87 243 12 49 9.82 396 9.95 164 0.04 836 9.87 232 11 50 9.82 410 9.95 190 0.04 810 9.87 221 10 51 9.82 439 9.95 215 0.04 785 9.87 187 7 52 9.82 439 9.95 294		$9.82\ 240$	9.94 884		$9.87\ 356$	22			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	39		9.94 910			21			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				0.05 065					
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$									
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$									
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		9.82 326							
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		9,82 340		0.04 938					
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	46			0.04 912	9.87 266	14			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$									
50 9.82 410 9.95 190 0.04 810 9.87 221 10 51 9.82 424 9.95 215 0.04 785 9.87 209 9 52 9.82 439 9.95 240 0.04 760 9.87 198 8 53 9.82 453 9.95 266 0.04 734 9.87 187 7 54 9.82 467 9.95 291 0.04 709 9.87 175 6 55 9.82 481 9.95 317 0.04 683 9.87 164 5 56 9.82 495 9.95 342 0.04 658 9.87 153 4 57 9.82 509 9.95 368 0.04 632 9.87 141 3 58 9.82 523 9.95 393 0.04 607 9.87 130 2 59 9.82 537 9.95 418 0.04 582 9.87 119 1 60 9.82 551 9.95 444 0.04 556 9.87 107 0									
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$									
52 9.82 439 9.95 240 0.04 760 9.87 198 8 53 9.82 453 9.95 266 0.04 734 9.87 187 7 54 9.82 467 9.95 291 0.04 709 9.87 175 6 55 9.82 481 9.95 317 0.04 683 9.87 164 5 56 9.82 495 9.95 342 0.04 658 9.87 153 4 57 9.82 509 9.95 368 0.04 632 9.87 141 3 58 9.82 523 9.95 393 0.04 607 9.87 130 2 59 9.82 537 9.95 418 0.04 582 9.87 119 1 60 9.82 551 9.95 444 0.04 556 9.87 107 0									
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$									
55 9.82 481 9.95 317 0.04 683 9.87 164 5 56 9.82 495 9.95 342 0.04 638 9.87 153 4 57 9.82 509 9.95 368 0.04 632 9.87 141 3 58 9.82 523 9.95 393 0.04 607 9.87 130 2 59 9.82 537 9.95 418 0.04 582 9.87 119 1 60 9.82 551 9.95 444 0.04 556 9.87 107 0	53	$9.82\ 453$	9.95 266		9.87 187	7			
57 9.82 509 9.95 368 0.04 632 9.87 141 3 58 9.82 523 9.95 393 0.04 607 9.87 130 2 59 9.82 537 9.95 418 0.04 582 9.87 119 1 60 9.82 551 9.95 444 0.04 556 9.87 107 0						6			
57 9.82 509 9.95 368 0.04 632 9.87 141 3 58 9.82 523 9.95 393 0.04 607 9.87 130 2 59 9.82 537 9.95 418 0.04 582 9.87 119 1 60 9.82 551 9.95 444 0.04 556 9.87 107 0						5 4			
60 9.82 551 9.95 444 0.04 556 9.87 107 0		$9.82\ 509$				3			
60 9.82 551 9.95 444 0.04 556 9.87 107 0	58	$9.82\ 523$	9.95 393			2			
L. Cos. L. Cot. L. Tan. L. Sin.	60	$9.82\ 551$	9.95 444	0.04 556	9.87 107	0			
		L. Cos.	L. Cot.	L. Tan.	L. Sin.	,			

o 9.82 551 9.95 444 0.04 556 9.87 107 60 1 9.82 565 9.95 495 0.04 535 9.87 086 59 2 9.82 579 9.95 495 0.04 535 9.87 073 58 3 9.82 607 9.95 545 0.04 485 9.87 073 57 4 9.82 607 9.95 5571 0.04 429 9.87 050 55 5 9.82 631 9.95 5622 0.04 378 9.87 028 53 7 9.82 663 9.95 677 0.04 328 9.87 028 53 8 9.82 663 9.95 677 0.04 328 9.87 005 51 10 9.82 671 9.95 688 0.04 302 9.86 998 50 11 9.82 676 9.95 778 0.04 277 9.86 998 50 11 9.82 677 9.95 790 0.04 277 9.86 999 49 12 9.82 719 9.95 772 0.04 277 9.86 907 48 12 9.82 719 9.95 777	42									
1 9.82 505 9.95 469 0.04 531 9.87 096 59 2 9.82 593 9.95 545 0.04 505 9.87 073 57 4 9.82 607 9.95 545 0.04 450 9.87 073 57 5 9.82 631 9.95 571 0.04 429 9.87 059 56 6 9.82 635 9.95 570 0.04 404 9.87 039 54 7 9.82 663 9.95 672 0.04 333 9.87 016 52 9 9.82 667 9.95 672 0.04 328 9.87 005 51 10 9.82 691 9.95 688 0.04 302 9.86 905 50 11 9.82 705 9.95 738 0.04 329 9.86 905 50 12 9.82 705 9.95 730 0.04 329 9.86 905 50 12 9.82 719 9.95 718 0.04 226 9.86 985 50 12 9.82 719 9.95 718 0.04 226 9.86 957 47 15 9.82 719 9.95 718 0.	,	L. Sin.	L. Tan.	L. Cot.	L. Cos.					
2 9.82 579 9.95 485 0.04 480 9.87 085 58 3 9.82 593 9.95 520 0.04 485 9.87 063 56 5 9.82 631 9.95 571 0.04 425 9.87 053 56 6 9.82 631 9.95 560 0.04 404 9.87 039 54 7 9.82 649 9.95 622 0.04 353 9.87 028 53 8 9.82 663 9.95 617 0.04 353 9.87 005 51 10 9.82 691 9.95 688 0.04 302 9.86 993 50 11 9.82 705 9.95 748 0.04 262 9.86 993 50 11 9.82 705 9.95 748 0.04 262 9.86 993 50 12 9.82 719 9.95 774 0.04 226 9.86 959 47 13 9.82 761 9.95 825 0.04 175 9.86 956 47 14 9.82 761 9.95 850 0.04 150 9.86 954 44 17 9.82 788 9.95 875 0	0	$-9.82\ 551$	9.95 444	0.04 556	9.87 107	60				
4 9.82 627 9.95 571 0.04 455 9.87 629 56 5 9.82 635 9.95 571 0.04 429 9.87 630 55 7 9.82 635 9.95 596 0.04 404 9.87 639 54 7 9.82 636 9.95 672 0.04 378 9.87 675 9.87 675 9 9.82 677 9.95 672 0.04 328 9.87 605 51 10 9.82 691 9.95 672 0.04 328 9.87 706 51 11 9.82 765 9.95 748 0.04 277 9.86 993 50 12 9.82 719 9.95 748 0.04 252 9.86 970 48 13 9.82 747 9.95 799 0.04 226 9.86 970 48 14 9.82 761 9.95 885 0.04 175 9.86 936 45 15 9.82 761 9.95 885 0.04 175 9.86 934 44 17 9.82 886 9.95 905 0.04 125 9.86 902 42 18 9.82 816 9.95 905	1									
4 9.82 627 9.95 571 0.04 455 9.87 629 56 5 9.82 635 9.95 571 0.04 429 9.87 630 55 7 9.82 635 9.95 596 0.04 404 9.87 639 54 7 9.82 636 9.95 672 0.04 378 9.87 675 9.87 675 9 9.82 677 9.95 672 0.04 328 9.87 605 51 10 9.82 691 9.95 672 0.04 328 9.87 706 51 11 9.82 765 9.95 748 0.04 277 9.86 993 50 12 9.82 719 9.95 748 0.04 252 9.86 970 48 13 9.82 747 9.95 799 0.04 226 9.86 970 48 14 9.82 761 9.95 885 0.04 175 9.86 936 45 15 9.82 761 9.95 885 0.04 175 9.86 934 44 17 9.82 886 9.95 905 0.04 125 9.86 902 42 18 9.82 816 9.95 905	2									
5 9.82 621 9.95 571 9.04 429 9.87 039 54 6 9.82 635 9.95 596 0.04 404 9.87 039 54 7 9.82 635 9.95 642 0.04 378 9.87 005 53 8 9.82 667 9.95 672 0.04 328 9.87 005 51 10 9.82 691 9.95 698 0.04 302 9.86 993 50 11 9.82 705 9.95 748 0.04 227 9.86 982 49 12 9.82 719 9.95 748 0.04 226 9.86 950 48 13 9.82 733 9.95 774 0.04 226 9.86 959 47 14 9.82 747 9.95 799 0.04 201 9.86 936 45 15 9.82 761 9.95 855 0.04 175 9.86 936 45 15 9.82 816 9.95 952 0.04 150 9.86 934 43 17 9.82 836 9.95 952 0.04 129 9.86 902 40 21 9.82 816 9.95 952 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td></th<>										
6 9.82 635 9.95 596 0.04 404 9.87 028 53 7 9.82 649 9.95 622 0.04 353 9.87 028 53 8 9.82 667 9.95 672 0.04 328 9.87 005 51 10 9.82 691 9.95 698 0.04 302 9.86 993 50 11 9.82 705 9.95 748 0.04 252 9.86 992 49 12 9.82 719 9.95 748 0.04 252 9.86 950 48 13 9.82 733 9.95 774 0.04 226 9.86 950 47 14 9.82 761 9.95 885 0.04 175 9.86 997 48 15 9.82 761 9.95 855 0.04 175 9.86 993 45 16 9.82 775 9.95 850 0.04 175 9.86 993 43 17 9.82 86 9.95 905 0.04 074 9.86 802 42 19 9.82 816 9.95 952 0.04 048 9.86 807 39 20 9.82 885 9.96 603 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td></td<>										
8 9,82 6673 9,95 672 0.04 328 9,87 005 51 10 9,82 671 9,95 698 0.04 302 9,86 993 50 11 9,82 705 9,95 743 0.04 277 9,86 982 49 12 9,82 719 9,95 744 0.04 252 9,86 959 47 14 9,82 733 9,95 774 0.04 252 9,86 959 47 14 9,82 761 9,95 799 0.04 201 9,86 947 46 15 9,82 761 9,95 825 0.04 175 9,86 936 45 16 9,82 788 9,95 875 0.04 125 9,86 936 45 17 9,82 802 9,95 901 0.04 125 9,86 902 42 20 9,82 816 9,35 952 0.04 125 9,86 800 41 20 9,82 830 9,95 952 0.04 074 9,86 807 40 21 9,82 858 9,96 902 0.03 972 9,86 807 39 22 9,82 855 9,96 028	6				9.87 039	54				
9 9.82 677 9.95 672 0.04 328 9.87 005 51 10 9.82 691 9.95 688 0.04 302 9.86 993 50 11 9.82 705 9.95 728 0.04 277 9.86 982 49 12 9.82 705 9.95 774 0.04 252 9.86 970 48 13 9.82 737 9.95 799 0.04 201 9.86 996 47 46 15 9.82 761 9.95 850 0.04 175 9.86 996 45 46 16 9.82 775 9.95 850 0.04 125 9.86 993 43 17 9.82 816 9.95 901 0.04 099 9.86 902 42 19 9.82 816 9.95 962 0.04 074 9.86 809 41 20 9.82 836 9.95 957 0.04 023 9.86 807 40 21 9.82 844 9.95 977 0.04 023 9.86 867 39 22 9.82 855 9.96 002 0.03 998 9.86 855 38 23 9.82 872	7									
10 9.82 691 9.95 698 0.04 302 9.86 993 50 11 9.82 705 9.95 723 0.04 277 9.86 982 49 12 9.82 719 9.95 748 0.04 226 9.86 970 48 13 9.82 747 9.95 799 0.04 201 9.86 947 46 14 9.82 747 9.95 825 0.04 175 9.86 936 45 16 9.82 761 9.95 825 0.04 175 9.86 936 45 16 9.82 775 9.95 855 0.04 125 9.86 924 44 17 9.82 802 9.95 901 0.04 099 9.86 902 42 19 9.82 816 9.95 977 0.04 023 9.86 807 40 20 9.82 830 9.95 977 0.04 023 9.86 807 40 21 9.82 844 9.95 977 0.04 023 9.86 807 39 22 9.82 844 9.95 977 0.04 023 9.86 879 40 24 9.82 885 9.96 028										
11 9.82 705 9.95 723 0.04 277 9.86 982 49 12 9.82 719 9.95 748 0.04 252 9.86 970 48 13 9.82 733 9.95 774 0.04 226 9.86 957 46 14 9.82 747 9.95 799 0.04 201 9.86 947 46 15 9.82 761 9.95 825 0.04 175 9.86 936 45 16 9.82 775 9.15 850 0.04 150 9.86 936 45 17 9.82 788 9.95 875 0.04 125 9.86 913 43 18 9.82 802 9.95 901 0.04 099 9.86 902 42 19 9.82 816 9.95 926 0.04 074 9.86 802 40 21 9.82 844 9.95 977 0.04 023 9.86 867 39 22 9.82 885 9.96 053 0.03 972 9.86 832 36 23 9.82 872 9.96 078 0.03 977 9.86 832 36 25 9.82 899 9.96 078										
12 9.82 719 9.95 748 0.04 256 9.86 970 48 13 9.82 733 9.95 779 0.04 226 9.86 959 47 14 9.82 761 9.95 825 0.04 175 9.86 936 45 15 9.82 761 9.95 825 0.04 175 9.86 936 45 16 9.82 775 9.95 875 0.04 125 9.86 912 44 17 9.82 802 9.95 901 0.04 099 9.86 902 42 19 9.82 836 9.95 952 0.04 074 9.86 800 41 20 9.82 830 9.95 952 0.04 074 9.86 887 40 21 9.82 858 9.96 002 0.03 998 9.86 857 39 22 9.82 857 9.96 028 0.03 972 9.86 844 37 24 9.82 857 9.96 078 0.03 992 9.86 851 35 24 9.82 859 9.96 078 0.03 992 9.86 821 35 25 9.82 9913 9.96 103										
13 9.82 733 9.95 774 0.04 201 9.86 947 46 15 9.82 761 9.95 825 0.04 175 9.86 936 46 16 9.82 775 9.95 855 0.04 175 9.86 924 44 17 9.82 788 9.95 875 0.04 125 9.86 902 42 18 9.82 802 9.95 901 0.04 099 9.86 902 42 19 9.82 816 9.95 926 0.04 074 9.86 890 41 20 9.82 830 9.95 977 0.04 023 9.86 867 39 21 9.82 844 9.95 977 0.04 023 9.86 867 39 22 9.82 885 9.96 002 0.03 998 9.86 857 38 23 9.82 872 9.96 028 0.03 972 9.86 844 37 24 9.82 885 9.96 078 0.03 992 9.86 821 35 25 9.82 891 9.96 078 0.03 992 9.86 80 34 27 9.82 927 9.96 129										
15 9.82 761 9.95 825 0.04 175 9.86 936 45 16 9.82 775 9.915 875 0.04 125 9.86 913 43 18 9.82 802 9.95 901 0.04 099 9.86 902 42 19 9.82 830 9.95 952 0.04 074 9.86 890 41 20 9.82 830 9.95 977 0.04 023 9.86 897 39 21 9.82 858 9.96 002 0.03 998 9.86 857 39 22 9.82 857 9.96 028 0.03 972 9.86 884 37 24 9.82 857 9.96 078 0.03 992 9.86 881 35 24 9.82 857 9.96 078 0.03 992 9.86 821 35 25 9.82 899 9.96 078 0.03 992 9.86 821 35 26 9.82 913 9.96 104 0.03 896 9.86 891 36 27 9.82 925 9.96 125 0.03 871 9.86 782 32 28 9.82 941 9.96 125		9.82 733								
16 9.82 775 9.95 850 0.04 150 9.86 924 44 17 9.82 788 9.95 875 0.04 125 9.86 913 43 18 9.82 802 9.95 901 0.04 099 9.86 902 42 19 9.82 816 9.95 926 0.04 074 9.86 890 41 20 9.82 830 9.95 977 0.04 023 9.86 867 39 21 9.82 844 9.95 977 0.04 023 9.86 867 39 22 9.82 885 9.96 002 0.03 998 9.86 873 38 23 9.82 872 9.96 028 0.03 972 9.86 844 37 24 9.82 885 9.96 078 0.03 922 9.86 832 36 25 9.82 913 9.96 104 0.03 896 9.86 899 34 27 9.82 927 9.96 180 0.03 871 9.86 768 32 28 9.82 968 9.96 205 0.03 795 9.86 763 30 31 9.82 968 9.96 231										
17 9.82 788 9.95 875 0.04 125 9.86 902 42 19 9.82 802 9.95 901 0.04 099 9.86 902 42 20 9.82 830 9.95 952 0.04 048 9.86 879 40 21 9.82 844 9.95 977 0.04 023 9.86 867 39 22 9.82 858 9.96 002 0.03 998 9.86 855 38 23 9.82 872 9.96 028 0.03 972 9.86 843 37 24 9.82 885 9.96 053 0.03 947 9.86 832 36 25 9.82 889 9.96 078 0.03 922 9.86 821 35 26 9.82 913 9.96 104 0.03 896 9.86 891 33 27 9.82 927 9.96 129 0.03 871 9.86 798 33 28 9.82 941 9.96 155 0.03 845 9.86 763 32 29 9.82 968 9.96 205 0.03 795 9.86 752 29 30 9.82 968 9.96 231										
18 9.82 816 9.95 901 0.04 099 9.86 902 42 20 9.82 830 9.95 952 0.04 074 9.86 890 41 20 9.82 830 9.95 952 0.04 048 9.86 897 39 21 9.82 844 9.95 977 0.04 023 9.86 867 39 22 9.82 857 9.96 028 0.03 972 9.86 884 37 24 9.82 855 9.96 053 0.03 947 9.86 832 36 25 9.82 899 9.96 078 0.03 922 9.86 821 35 26 9.82 913 9.96 104 0.03 896 9.86 891 35 27 9.82 927 9.96 129 0.03 871 9.86 786 32 29 9.82 955 9.96 125 0.03 845 9.86 786 32 29 9.82 968 9.96 205 0.03 795 9.86 763 30 31 9.82 982 9.96 231 0.03 769 9.86 752 29 32 9.82 906 9.96 231										
20 9.82 830 9.95 952 0.04 048 9.86 879 40 21 9.82 844 9.95 977 0.04 023 9.86 867 39 22 9.82 858 9.96 002 0.03 998 9.86 855 38 23 9.82 872 9.96 028 0.03 972 9.86 832 36 24 9.82 885 9.96 078 0.03 922 9.86 832 36 25 9.82 899 9.96 078 0.03 922 9.86 821 35 26 9.82 913 9.96 104 0.03 896 9.86 891 33 27 9.82 927 9.96 129 0.03 871 9.86 798 33 28 9.82 941 9.96 155 0.03 845 9.86 786 32 29 9.82 956 9.96 205 0.03 795 9.86 763 30 31 9.82 968 9.96 205 0.03 795 9.86 752 29 32 9.82 906 9.96 231 0.03 769 9.86 752 29 32 9.82 906 0.06 256	18	9.82802	9.95 901		9.86 902					
21 9.82 844 9.95 977 0.04 023 9.86 867 39 22 9.82 858 9.96 002 0.03 998 9.86 855 38 23 9.82 872 9.96 028 0.03 972 9.86 844 37 24 9.82 889 9.96 053 0.03 922 9.86 832 36 25 9.82 899 9.96 104 0.03 896 9.86 899 34 27 9.82 927 9.93 129 0.03 871 9.86 798 33 28 9.82 941 9.96 155 0.03 845 9.86 786 32 29 9.82 955 9.96 180 0.03 820 9.86 775 31 30 9.82 968 9.96 205 0.03 795 9.86 752 29 32 9.82 966 9.96 256 0.03 744 9.86 740 28 33 9.83 037 9.96 332 0.03 668 9.86 705 29 34 9.83 037 9.96 332 0.03 668 9.86 705 25 35 9.83 037 9.96 332			9.95 926	0.04 074	9.86 890	41				
22 9.82 858 9.96 002 0.03 998 9.86 855 38 23 9.82 8572 9.96 028 0.03 972 9.86 844 37 24 9.82 855 9.96 053 0.03 947 9.86 832 36 25 9.82 899 9.96 078 0.03 922 9.86 821 35 26 9.82 913 9.96 104 0.03 896 9.86 899 34 27 9.82 927 9.96 129 0.03 871 9.86 786 32 28 9.82 941 9.96 155 0.03 845 9.86 786 32 29 9.82 955 9.96 205 0.03 795 9.86 763 30 31 9.82 968 9.96 205 0.03 795 9.86 763 30 31 9.82 996 9.96 251 0.03 769 9.86 752 29 32 9.82 906 9.96 251 0.03 744 9.86 740 28 33 9.83 010 9.96 281 0.03 744 9.86 740 28 34 9.83 051 9.96 32					9.86 879	40				
23 9.82 872 9.96 028 0.03 972 9.86 844 37 24 9.82 885 9.96 078 0.03 947 9.86 832 36 25 9.82 899 9.96 078 0.03 992 9.86 821 35 26 9.82 913 9.96 104 0.03 896 9.86 899 34 27 9.82 914 9.96 155 0.03 845 9.86 786 32 28 9.82 941 9.96 205 0.03 820 9.86 763 30 30 9.82 908 9.96 205 0.03 769 9.86 763 30 31 9.82 982 9.96 231 0.03 769 9.86 763 30 32 9.82 906 9.96 256 0.03 744 9.86 742 29 33 9.83 010 9.96 281 0.03 719 9.86 728 27 34 9.83 023 9.96 337 0.03 693 9.86 717 26 35 9.83 051 9.96 383 0.03 617 9.86 682 23 36 9.83 051 9.96 383										
24 9.82 885 9.96 078 0.03 922 9.86 832 36 25 9.82 899 9.96 078 0.03 922 9.86 891 35 26 9.82 913 9.96 104 0.03 896 9.86 798 33 27 9.82 927 9.96 129 0.03 841 9.86 798 33 28 9.82 941 9.96 180 0.03 820 9.86 7786 32 29 9.82 958 9.96 205 0.03 795 9.86 763 30 30 9.82 968 9.96 205 0.03 795 9.86 752 29 32 9.82 996 9.96 256 0.03 744 9.86 740 28 33 9.83 010 9.96 281 0.03 719 9.86 752 29 34 9.83 023 9.96 332 0.03 693 9.86 705 25 35 9.83 057 9.96 332 0.03 693 9.86 705 25 36 9.83 065 9.96 383 0.03 617 9.86 682 23 38 9.83 078 9.96 408	22									
25 9.82 899 9.96 078 0.03 922 9.86 821 35 26 9.82 913 9.96 104 0.03 896 9.86 899 34 27 9.82 927 9.96 129 0.03 871 9.86 786 32 28 9.82 941 9.96 155 0.03 845 9.86 786 32 29 9.82 955 9.96 205 0.03 795 9.86 763 30 30 9.82 968 9.96 205 0.03 709 9.86 763 30 31 9.82 982 9.96 231 0.03 769 9.86 740 28 32 9.82 906 9.96 256 0.03 744 9.86 740 28 33 9.83 010 9.96 281 0.03 769 9.86 740 28 34 9.83 023 9.96 307 0.03 693 9.86 717 26 35 9.83 051 9.96 332 0.03 608 9.86 705 25 36 9.83 051 9.96 332 0.03 608 9.86 705 25 36 9.83 051 9.96 357										
26 9.82 913 9.96 104 0.03 896 9.86 899 34 27 9.82 927 9.96 129 0.03 871 9.86 798 33 28 9.82 941 9.96 155 0.03 845 9.86 786 32 29 9.82 955 9.96 180 0.03 820 9.86 775 31 30 9.82 908 9.96 205 0.03 795 9.86 763 30 31 9.82 982 9.96 231 0.03 769 9.86 752 29 32 9.82 906 9.96 256 0.03 719 9.86 752 29 33 9.83 010 9.96 281 0.03 719 9.86 728 27 34 9.83 023 9.96 332 0.03 693 9.86 717 26 35 9.83 051 9.96 332 0.03 693 9.86 717 26 36 9.83 051 9.96 332 0.03 693 9.86 694 24 37 9.83 065 9.96 383 0.03 617 9.86 682 23 39 9.83 078 9.96 433						35				
28 9.82 941 9.96 155 0.03 845 9.86 786 32 29 9.82 955 9.96 180 0.03 820 9.86 775 31 30 9.82 968 9.96 205 0.03 795 9.86 763 30 31 9.82 982 9.96 231 0.03 769 9.86 752 29 32 9.82 996 9.96 256 0.03 744 9.86 740 28 33 9.83 010 9.96 281 0.03 719 9.86 740 28 34 9.83 023 9.96 307 0.03 693 9.86 717 26 35 9.83 037 9.96 332 0.03 683 9.86 705 25 36 9.83 051 9.96 383 0.03 643 9.86 694 24 37 9.83 065 9.96 408 0.03 592 9.86 670 22 39 9.83 069 9.96 433 0.03 567 9.86 659 21 40 9.83 120 9.96 459 0.03 541 9.86 635 21 41 9.83 133 9.96 510	26					34				
29 9.82 955 9.96 180 0.03 820 9.86 775 31 30 9.82 968 9.96 205 0.03 795 9.86 763 30 31 9.82 982 9.96 231 0.03 769 9.86 752 29 32 9.82 906 9.96 256 0.03 719 9.86 740 28 33 9.83 010 9.96 281 0.03 719 9.86 728 27 34 9.83 023 9.96 332 0.03 693 9.86 717 26 35 9.83 051 9.96 332 0.03 693 9.86 717 26 36 9.83 051 9.96 337 0.03 643 9.86 694 24 37 9.83 065 9.96 383 0.03 617 9.86 682 23 39 9.83 065 9.96 408 0.03 592 9.86 659 21 40 9.83 106 9.96 433 0.03 567 9.86 659 21 41 9.83 120 9.96 484 0.03 516 9.86 647 20 41 9.83 134 9.96 535	27									
30 9.82 968 9.96 205 0.03 795 9.86 763 30 31 9.82 982 9.96 231 0.03 769 9.86 752 29 32 9.82 996 9.96 256 0.03 744 9.86 752 29 33 9.83 010 9.96 281 0.03 719 9.86 740 28 34 9.83 023 9.96 307 0.03 693 9.86 717 26 35 9.83 037 9.96 332 0.03 693 9.86 705 25 36 9.83 051 9.96 383 0.03 643 9.86 682 23 37 9.83 065 9.96 383 0.03 617 9.86 682 23 38 9.83 078 9.96 408 0.03 592 9.86 670 22 39 9.83 092 9.96 433 0.03 561 9.86 632 23 39 9.83 106 9.96 459 0.03 541 9.86 647 20 40 9.83 120 9.96 484 0.03 516 9.86 635 19 42 9.83 133 9.96 535	28									
31 9.82 982 9.96 231 0.03 769 9.86 752 29 32 9.82 996 9.96 256 0.03 744 9.86 740 28 33 9.83 010 9.96 281 0.03 719 9.86 728 27 34 9.83 023 9.96 307 0.03 693 9.86 717 26 35 9.83 037 9.96 332 0.03 643 9.86 694 24 37 9.83 065 9.96 383 0.03 643 9.86 694 24 38 9.83 078 9.96 408 0.03 592 9.86 670 22 39 9.83 062 9.96 433 0.03 567 9.86 659 21 40 9.83 106 9.96 459 0.03 541 9.86 635 21 41 9.83 120 9.96 484 0.03 546 9.86 635 19 42 9.83 133 9.96 510 0.03 490 9.86 624 18 43 9.83 147 9.96 535 0.03 465 9.86 694 14 44 9.83 184 9.96 661				manufacture control of						
32 9.82 996 9.96 256 0.03 744 9.86 740 28 33 9.83 010 9.96 281 0.03 719 9.86 728 27 34 9.83 037 9.96 307 0.03 693 9.86 705 25 35 9.83 037 9.96 332 0.03 683 9.86 705 25 36 9.83 051 9.96 383 0.03 643 9.86 684 24 37 9.83 065 9.96 483 0.03 592 9.86 670 22 39 9.83 062 9.96 433 0.03 567 9.86 659 21 40 9.83 106 9.96 459 0.03 541 9.86 635 21 41 9.83 120 9.96 484 0.03 516 9.86 637 20 41 9.83 133 9.96 510 0.03 490 9.86 624 18 42 9.83 147 9.96 535 0.03 445 9.86 632 13 44 9.83 184 9.96 630 0.03 440 9.86 589 15 46 9.83 188 9.96 611										
33 9.83 010 9.96 281 0.03 719 9.86 728 27 34 9.83 023 9.96 307 0.03 693 9.86 717 26 35 9.83 031 9.96 332 0.03 643 9.86 705 25 36 9.83 051 9.96 387 0.03 643 9.86 694 24 37 9.83 065 9.96 383 0.03 617 9.86 692 23 38 9.83 078 9.96 408 0.03 592 9.86 659 21 40 9.83 106 9.96 459 0.03 567 9.86 659 21 41 9.83 120 9.96 484 0.03 516 9.86 647 20 41 9.83 132 9.96 535 0.03 465 9.86 642 17 42 9.83 134 9.96 535 0.03 465 9.86 612 17 44 9.83 161 9.96 586 0.03 440 9.86 690 16 45 9.83 174 9.96 586 0.03 445 9.86 587 17 46 9.83 188 9.96 611										
35 9.83 037 9.96 332 0.03 668 9.86 705 25 36 9.83 051 9.96 387 0.03 643 9.86 694 24 37 9.83 065 9.96 383 0.03 617 9.86 682 23 38 9.83 078 9.96 408 0.03 562 9.86 670 22 39 9.83 106 9.96 459 0.03 567 9.86 659 21 40 9.83 120 9.96 459 0.03 541 9.86 637 20 41 9.83 133 9.96 510 0.03 490 9.86 624 18 42 9.83 147 9.96 535 0.03 445 9.86 624 18 43 9.83 147 9.96 586 0.03 445 9.86 692 16 44 9.83 188 9.96 611 0.03 389 9.86 589 15 46 9.83 188 9.96 611 0.03 389 9.86 557 13 47 9.83 229 9.96 632 0.03 338 9.86 554 12 49 9.83 229 9.96 687										
36 9.83 051 9.96 357 0.03 643 9.86 694 24 37 9.83 065 9.96 383 0.03 617 9.86 682 23 38 9.83 078 9.96 408 0.03 592 9.86 670 22 39 9.83 092 9.96 433 0.03 567 9.86 659 21 40 9.83 106 9.96 459 0.03 541 9.86 635 19 41 9.83 120 9.96 484 0.03 516 9.86 624 18 42 9.81 133 9.96 510 0.03 490 9.86 624 18 43 9.83 147 9.96 555 0.03 445 9.86 602 16 44 9.83 161 9.96 560 0.03 440 9.86 600 16 45 9.83 188 9.96 611 0.03 389 9.86 577 14 47 9.83 202 9.96 636 0.03 364 9.86 565 13 48 9.83 215 9.96 632 0.03 338 9.86 534 11 50 9.83 242 9.96 738						26				
37 9.83 065 9.96 383 0.03 617 9.86 682 23 38 9.83 078 9.96 408 0.03 592 9.86 670 22 39 9.83 092 9.96 433 0.03 567 9.86 670 22 40 9.83 106 9.96 459 0.03 541 9.86 647 20 41 9.83 120 9.96 484 0.03 516 9.86 635 19 42 9.83 133 9.96 535 0.03 465 9.86 624 18 43 9.83 147 9.96 535 0.03 465 9.86 602 17 44 9.83 161 9.96 586 0.03 440 9.86 602 16 45 9.83 174 9.96 586 0.03 444 9.86 589 15 46 9.83 188 9.96 611 0.03 389 9.86 537 14 47 9.83 225 9.96 662 0.03 338 9.86 534 12 49 9.83 229 9.96 687 0.03 313 9.86 534 12 50 9.83 242 9.96 772						25				
38 9.83 078 9.96 408 0.03 562 9.86 670 22 39 9.83 092 9.96 433 0.03 567 9.86 659 21 40 9.83 106 9.96 459 0.03 541 9.86 647 20 41 9.83 120 9.96 484 0.03 516 9.86 635 19 42 9.83 133 9.96 510 0.03 490 9.86 624 18 43 9.83 147 9.96 535 0.03 465 9.86 602 17 44 9.83 161 9.96 586 0.03 440 9.86 692 16 45 9.83 174 9.96 586 0.03 414 9.86 589 15 46 9.83 188 9.96 611 0.03 389 9.86 589 15 47 9.83 225 9.96 632 0.03 338 9.86 554 12 49 9.83 225 9.96 662 0.03 338 9.86 554 12 49 9.83 229 9.96 687 0.03 288 9.86 530 10 51 9.83 242 9.96 738						24				
40 9.83 106 9.96 459 0.03 541 9.86 647 20 41 9.83 120 9.96 484 0.03 516 9.86 635 19 42 9.83 133 9.96 510 0.03 490 9.86 624 18 43 9.83 147 9.96 535 0.03 445 9.86 600 16 45 9.83 174 9.96 586 0.03 440 9.86 600 16 45 9.83 174 9.96 586 0.03 414 9.86 589 15 46 9.83 188 9.96 611 0.03 389 9.86 575 14 47 9.83 292 9.96 636 0.03 334 9.86 554 12 48 9.83 225 9.96 662 0.03 338 9.86 554 12 49 9.83 229 9.96 687 0.03 313 9.86 532 10 51 9.83 242 9.96 712 0.03 288 9.86 530 10 51 9.83 270 9.96 788 0.03 262 9.86 507 8 52 9.83 310 9.96 88 <						22				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		9.83 092	9.96 433	0.03 567	9.86 659	21				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	40	9.83 106	9.96 459	0.03 541	9.86 647	20				
43 9.83 147 9.96 535 0.03 445 9.86 612 17 44 9.83 161 9.96 500 0.03 440 9.86 600 16 45 9.83 174 9.96 586 0.03 414 9.86 589 15 46 9.83 188 9.96 611 0.03 389 9.86 577 14 47 9.83 202 9.96 636 0.03 304 9.86 565 13 48 9.83 215 9.96 662 0.03 338 9.86 554 12 49 9.83 229 9.96 687 0.03 313 9.86 542 11 50 9.83 242 9.96 738 0.03 262 9.86 530 10 51 9.83 270 9.96 763 0.03 237 9.86 501 8 52 9.83 273 9.96 788 0.03 212 9.86 495 7 54 9.83 297 9.96 814 0.03 186 9.86 495 7 54 9.83 324 9.96 864 0.03 136 9.86 400 4 57 9.83 328 9.96 890 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td></td<>										
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$										
45 9.83 174 9.96 586 0.03 414 9.86 589 15 46 9.83 188 9.96 611 0.03 389 9.86 587 14 47 9.83 292 9.96 636 0.03 334 9.86 557 13 48 9.83 215 9.96 662 0.03 338 9.86 554 12 49 9.83 229 9.96 687 0.03 288 9.86 530 10 50 9.83 242 9.96 712 0.03 288 9.86 530 10 51 9.83 276 9.96 738 0.03 262 9.86 518 9 52 9.83 270 9.96 788 0.03 212 9.86 495 7 53 9.83 283 9.96 814 0.03 186 9.86 495 7 54 9.83 297 9.96 814 0.03 186 9.86 472 5 55 9.83 310 9.96 804 0.03 161 9.86 472 5 56 9.83 324 9.96 80 0.03 101 9.86 400 4 57 9.83 335 9.96 800 0.										
46 9.83 188 9.96 611 0.03 389 9.86 377 14 47 9.83 202 9.96 636 0.63 364 9.86 565 13 48 9.83 215 9.96 662 0.03 338 9.86 554 12 49 9.83 229 9.96 687 0.03 313 9.86 542 11 50 9.83 242 9.96 712 0.03 288 9.86 530 10 51 9.83 256 9.96 738 0.03 262 9.86 501 8 52 9.83 270 9.96 788 0.03 212 9.86 495 7 53 9.83 327 9.96 814 0.03 186 9.86 483 6 55 9.83 310 9.96 829 0.03 161 9.86 425 5 56 9.83 324 9.96 864 0.03 136 9.86 400 4 57 9.83 338 9.96 890 0.03 110 9.86 448 3 58 9.83 351 9.96 990 0.03 060 9.86 448 2 59 9.83 375 9.96 940 0.										
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	46	9.83 188	9.96 611		9.86 577	14				
49 9.83 229 9.96 687 0.03 313 9.86 542 11 50 9.83 242 9.96 712 0.03 288 9.86 530 10 51 9.83 256 9.96 738 0.03 262 9.86 507 8 52 9.83 270 9.96 788 0.03 212 9.86 597 8 53 9.83 283 9.96 788 0.03 212 9.86 495 7 54 9.83 297 9.96 814 0.03 186 9.86 483 6 55 9.83 310 9.96 829 0.03 161 9.86 472 5 56 9.83 324 9.96 864 0.03 136 9.86 400 4 57 9.83 338 9.96 890 0.03 110 9.86 448 3 58 9.83 371 9.96 915 0.03 085 9.86 436 2 59 9.83 375 9.96 940 0.03 060 9.86 425 1 60 9.83 378 9.96 966 0.03 034 9.86 413 0										
50 9.83 242 9.96 712 0.03 288 9.86 530 10 51 9.83 256 9.96 738 0.03 262 9.86 518 9 52 9.83 270 9.96 763 0.03 237 9.86 507 8 53 9.83 283 9.96 788 0.03 212 9.86 495 7 54 9.83 297 9.96 814 0.03 186 9.86 483 6 55 9.83 310 9.96 839 0.03 161 9.86 472 5 56 9.83 324 9.96 840 0.03 136 9.86 460 4 57 9.83 38 9.96 880 0.03 110 9.86 486 3 58 9.83 351 9.96 915 0.03 085 9.86 436 2 59 9.83 378 9.96 906 0.03 034 9.86 413 0										
51 9.83 256 9.96 738 0.03 262 9.86 518 9 52 9.83 270 9.96 763 0.03 237 9.86 507 8 53 9.83 283 9.96 788 0.03 212 9.86 495 7 54 9.83 297 9.96 814 0.03 186 9.86 483 6 55 9.83 310 9.96 839 0.03 161 9.86 472 5 56 9.83 324 9.96 864 0.03 136 9.86 460 4 57 9.83 38 9.96 880 0.03 110 9.86 486 3 58 9.83 351 9.96 915 0.03 085 9.86 436 2 59 9.83 378 9.96 906 0.03 034 9.86 413 0										
52 9.83 270 9.96 763 0.03 237 9.86 507 8 53 9.83 283 9.06 788 0.03 212 9.86 495 7 54 9.83 291 9.96 814 0.03 186 9.86 483 6 55 9.83 310 9.96 830 0.03 161 9.86 472 5 56 9.83 324 9.96 804 0.03 136 9.86 460 4 57 9.83 338 9.96 890 0.03 110 9.86 448 3 58 9.83 351 9.96 901 0.03 085 9.86 436 2 59 9.83 365 9.96 940 0.03 030 9.86 425 1 60 9.83 378 9.96 906 0.03 034 9.86 413 0										
53 9.83 283 9.96 788 0.03 212 9.86 495 7 54 9.83 297 9.96 814 0.03 186 9.86 483 6 55 9.83 310 9.96 839 0.03 161 9.86 472 5 56 9.83 324 9.96 864 0.03 136 9.86 460 4 57 9.83 338 9.96 890 0.03 110 9.86 448 3 58 9.83 375 9.96 940 0.03 060 9.86 425 1 60 9.83 378 9.96 966 0.03 034 9.86 413 0										
55 9.83 310 9.96 839 0.03 161 9.86 472 5 56 9.83 324 9.96 864 0.03 136 9.86 460 4 57 9.83 338 9.96 880 0.03 110 9.86 488 3 58 9.83 351 9.96 915 0.03 085 9.86 436 2 59 9.83 375 9.96 940 0.03 060 9.86 425 1 60 9.83 378 9.96 966 0.03 034 9.86 413 0						7				
56 9.83 324 9.96 864 0.03 136 9.86 440 4 57 9.83 338 9.96 880 0.03 110 9.86 448 3 58 9.83 351 9.96 915 0.03 085 9.86 436 2 59 9.83 365 9.96 940 0.03 060 9.86 425 1 60 9.83 378 9.96 966 0.03 034 9.86 413 0										
57 9.83 338 9.96 890 0.03 110 9.86 448 3 58 9.83 351 9.96 915 0.03 085 9.86 436 2 59 9.83 365 9.96 940 0.03 060 9.86 425 1 60 9.83 378 9.96 966 0.03 034 9.86 413 0										
58 9.83 351 9.96 915 0.03 085 9.86 436 2 59 9.83 375 9.96 940 0.03 060 9.86 425 1 60 9.83 378 9.96 966 0.03 034 9.86 413 0										
59 9.83 365 9.96 940 0.03 060 9.86 425 1 60 9.83 378 9.96 966 0.03 034 9.86 413 0		9.83/351			9.86 436					
						1				
L. Cos. L. Cot. L. Tan. L. Sin.	60	9.83 378	9.96 966		9.86 413	0				
		L. Cos.	L. Cot.	L. Tan.	L. Sin.	,				

0 9.83 378 9.96 966 0.03 034 9.86 413 60 1 9.83 392 9.96 991 0.03 009 9.86 401 59 2 9.83 405 9.97 016 0.02 984 9.86 389 58 3 9.83 419 9.97 007 0.02 938 9.86 386 56 5 9.83 473 9.97 002 0.02 988 9.86 336 56 6 9.83 473 9.97 118 0.02 882 9.86 342 54 7 9.83 473 9.97 168 0.02 837 9.86 306 51 10 9.83 500 9.97 183 0.02 867 9.86 306 51 10 9.83 540 9.97 219 0.02 751 9.86 295 50 11 9.83 567 9.97 295 0.02 731 9.86 221 46 4 9.83 561 9.97 371 0.02 655 9.86 225 47 14 9.83 541 9.97 371 0.02 655 9.86 223 41 15 9.83 621 9.97 471 0.	-	L. Sin.	L. Tan.	L. Cot.	L. Cos.	
1 9.83 392 9.96 991 0.03 009 9.86 401 59 2 9.83 405 9.97 016 0.02 984 9.86 389 58 3 9.83 412 9.97 017 0.02 938 9.86 336 56 5 9.83 446 9.97 012 0.02 908 9.86 336 56 5 9.83 450 9.97 118 0.02 882 9.86 342 54 7 9.83 473 9.97 113 0.02 857 9.86 330 53 8 9.83 500 9.97 193 0.02 807 9.86 306 51 10 9.83 500 9.97 193 0.02 807 9.86 306 51 10 9.83 500 9.97 219 0.02 751 9.86 295 50 11 9.83 540 9.97 219 0.02 755 9.86 283 49 12 9.83 541 9.97 297 0.02 705 9.86 284 47 14 9.83 541 9.97 320 0.02 655 9.86 247 46 15 9.83 621 9.97 336 0.	0					60
2 9.83 405 9.97 016 0.02 984 9.86 389 58 3 9.83 419 9.97 047 0.02 933 9.86 307 57 5 9.83 429 9.97 047 0.02 933 9.86 354 55 6 9.83 473 9.97 118 0.02 882 9.86 342 54 7 9.83 500 9.97 138 0.02 837 9.86 330 53 8 9.83 546 9.97 139 0.02 837 9.86 330 53 9 9.83 500 9.97 139 0.02 837 9.86 336 51 10 9.83 500 9.97 139 0.02 781 9.86 295 50 11 9.83 567 9.97 219 0.02 731 9.86 295 50 11 9.83 567 9.97 295 0.02 650 9.86 235 49 12 9.83 541 9.97 371 0.02 655 9.86 234 46 15 9.83 581 9.97 373 0.02 655 9.86 234 46 15 9.83 648 9.97 347 0.						
4 9.83 446 9.97 007 0.02 908 9.86 356 56 5 9.83 446 9.97 002 0.02 908 9.86 354 55 6 9.83 453 9.97 118 0.02 882 9.86 336 53 8 9.83 486 9.97 108 0.02 882 9.86 306 53 8 9.83 500 9.97 193 0.02 807 9.86 306 51 10 9.83 513 9.97 219 0.02 751 9.86 205 50 11 9.83 527 9.97 299 0.02 731 9.86 205 50 12 9.83 504 9.97 299 0.02 705 9.86 235 49 13 9.83 554 9.97 320 0.02 680 9.86 247 46 15 9.83 594 9.97 315 0.02 655 9.86 235 45 16 9.83 594 9.97 315 0.02 655 9.86 23 44 17 9.83 688 9.97 347 0.02 604 9.86 211 43 18 9.83 621 9.97 447 0	2			0.02 984		
5 9.83 446 9.97 092 0.02 908 9.86 342 54 6 9.83 459 9.97 118 0.02 857 9.86 330 53 8 9.83 473 9.97 168 0.02 832 9.86 306 51 9 9.83 500 9.97 193 0.02 807 9.86 306 51 10 9.83 513 9.97 219 0.02 751 9.86 205 50 11 9.83 527 9.97 244 0.02 756 9.86 283 49 12 9.83 540 9.97 295 0.02 705 9.86 283 49 13 9.83 549 9.97 320 0.02 680 9.86 247 46 15 9.83 591 9.97 345 0.02 655 9.86 235 45 16 9.83 594 9.97 371 0.02 629 9.86 223 44 17 9.83 608 9.97 336 0.02 604 9.86 211 43 18 9.83 618 9.97 421 0.02 579 9.86 204 42 19 9.83 648 9.97 472 <td< td=""><td>3</td><td></td><td></td><td></td><td></td><td></td></td<>	3					
6 9.83 479 9.97 118 0.02 887 9.86 342 54 7 9.83 473 9.97 148 0.02 857 9.86 330 53 8 9.83 486 9.97 108 0.02 807 9.86 306 51 10 9.83 513 9.97 219 0.02 781 9.86 295 50 11 9.83 527 9.97 244 0.02 766 9.86 283 49 12 9.83 507 9.97 295 0.02 705 9.86 283 49 13 9.83 567 9.97 320 0.02 680 9.86 247 46 14 9.83 567 9.97 320 0.02 680 9.86 247 46 15 9.83 594 9.97 315 0.02 655 9.86 235 45 16 9.83 594 9.97 315 0.02 655 9.86 235 45 17 9.83 684 9.97 347 0.02 652 9.86 223 44 18 9.83 621 9.97 447 0.02 579 9.86 100 42 20 9.83 648 9.97 447 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td></t<>						
7 9.83 486 9.97 168 0.02 852 9.86 330 53 8 9.83 486 9.97 168 0.02 807 9.86 306 51 10 9.83 500 9.97 193 0.02 807 9.86 306 51 10 9.83 513 9.97 219 0.02 756 9.86 295 50 11 9.83 527 9.97 244 0.02 756 9.86 283 49 12 9.83 544 9.97 295 0.02 705 9.86 237 47 14 9.83 567 9.97 320 0.02 605 9.86 237 45 15 9.83 581 9.97 315 0.02 655 9.86 235 45 16 9.83 581 9.97 371 0.02 629 9.86 223 44 17 9.83 682 9.97 371 0.02 629 9.86 223 44 17 9.83 681 9.97 421 0.02 579 9.86 280 42 20 9.83 648 9.97 472 0.02 553 9.86 184 41 20 9.83 648 9.97 477 <						
8 9,83 486 9,97 108 0.02 807 9.86 306 51 10 9,83 503 9,97 193 0.02 807 9.86 206 51 11 9,83 513 9,97 219 0.02 756 9.86 295 50 12 9,83 540 9,97 295 0.02 705 9.86 259 47 14 9,83 567 9,97 320 0.02 680 9.86 247 46 15 9,83 581 9,97 315 0.02 655 9.86 235 47 16 9,83 581 9,97 317 0.02 629 9.86 231 44 17 9,83 608 9,97 317 0.02 629 9.86 221 43 18 9,83 621 9,97 421 0.02 579 9.86 200 42 20 9,83 648 9,97 472 0.02 533 9.86 188 41 20 9,83 648 9,97 472 0.02 533 9.86 166 39 21 9,83 661 9,97 747 0.02 53 9.86 166 39 22 9,83 648 9,97 747 <						
10 9.83 513 9.97 219 0.02 781 9.86 295 50 11 9.83 527 9.97 244 0.02 736 9.86 283 49 12 9.83 540 9.97 295 0.02 705 9.86 297 48 13 9.83 551 9.97 320 0.02 685 9.86 295 47 14 9.83 581 9.97 345 0.02 655 9.86 223 45 16 9.83 581 9.97 371 0.02 629 9.86 223 44 17 9.83 608 9.97 381 0.02 604 9.86 221 43 18 9.83 621 9.97 421 0.02 579 9.86 200 42 19 9.83 634 9.97 447 0.02 573 9.86 188 41 20 9.83 648 9.97 447 0.02 553 9.86 188 41 20 9.83 681 9.97 447 0.02 528 9.86 176 40 21 9.83 688 9.97 523 0.02 477 9.86 123 38 22 9.83 781 9.97 533	8	9,83 486				52
11 9.83 527 9.97 244 0.02 756 9.86 283 49 12 9.83 540 9.97 295 0.02 705 9.86 257 48 13 9.83 567 9.97 320 0.02 680 9.86 247 46 15 9.83 581 9.97 345 0.02 655 9.86 225 45 16 9.83 581 9.97 371 0.02 629 9.86 223 44 17 9.83 608 9.97 396 0.02 604 9.86 231 43 18 9.83 621 9.97 447 0.02 579 9.86 200 42 19 9.83 648 9.97 447 0.02 553 9.86 184 41 20 9.83 648 9.97 472 0.02 553 9.86 164 39 21 9.83 661 9.97 497 0.02 503 9.86 164 39 22 9.83 674 9.97 523 0.02 477 9.86 123 36 23 9.83 785 9.97 548 0.02 427 9.86 104 37 24 9.83 715 9.97 558						
12 9.83 540 9.97 295 0.02 705 9.86 259 47 13 9.83 557 9.97 320 0.02 680 9.86 247 46 15 9.83 581 9.97 315 0.02 685 9.86 225 45 16 9.83 594 9.97 371 0.02 629 9.86 223 44 17 9.83 689 9.97 396 0.02 604 9.86 200 42 18 9.83 621 9.97 447 0.02 579 9.86 200 42 19 9.83 634 9.97 447 0.02 579 9.86 100 42 20 9.83 648 9.97 472 0.02 528 9.86 176 40 21 9.83 661 9.97 497 0.02 503 9.86 164 39 22 9.83 674 9.97 523 0.02 477 9.86 152 38 23 9.83 688 9.97 573 0.02 452 9.86 149 37 24 9.83 705 9.97 536 0.02 402 9.86 161 35 25 9.83 741 9.97 624						
13 9.83 5544 9.97 295 0.02 705 9.86 259 47 14 9.83 5817 9.97 345 0.02 685 9.86 235 45 16 9.83 581 9.97 371 0.02 692 9.86 223 44 17 9.83 608 9.97 396 0.02 604 9.86 200 42 18 9.83 621 9.97 421 0.02 579 9.86 200 42 19 9.83 634 9.97 447 0.02 553 9.86 188 41 20 9.83 661 9.97 472 0.02 528 9.86 176 40 21 9.83 661 9.97 427 0.02 528 9.86 164 39 22 9.83 674 9.97 523 0.02 477 9.86 164 37 23 9.83 688 9.97 548 0.02 452 9.86 140 37 24 9.83 701 9.97 538 0.02 477 9.86 128 36 25 9.83 715 9.97 508 0.02 402 9.86 160 32 27 9.83 785 9.97 649						
14 9.83 567 9.97 345 0.02 655 9.86 235 45 16 9.83 581 9.97 371 0.02 629 9.86 233 44 17 9.83 608 9.97 306 0.02 604 9.86 211 43 18 9.83 621 9.97 421 0.02 579 9.86 200 42 19 9.83 634 9.97 472 0.02 528 9.86 176 40 21 9.83 661 9.97 497 0.02 503 9.86 164 39 22 9.83 674 9.97 523 0.02 477 9.86 152 38 23 9.83 688 9.97 548 0.02 452 9.86 164 39 24 9.83 701 9.97 573 0.02 427 9.86 128 36 25 9.83 715 9.97 598 0.02 402 9.86 104 34 27 9.83 741 9.97 649 0.02 376 9.86 080 32 29 9.83 768 9.97 700 0.02 250 9.86 086 31 30 9.83 781 9.97 725						
15						
17 9.83 608 9.97 396 0.02 579 9.86 201 43 19 9.83 634 9.97 421 0.02 579 9.86 200 42 20 9.83 648 9.97 472 0.02 528 9.86 176 40 21 9.83 661 9.97 497 0.02 503 9.86 164 39 22 9.83 674 9.97 523 0.02 477 9.86 152 38 23 9.83 688 9.97 548 0.02 452 9.86 140 37 24 9.83 701 9.97 573 0.02 427 9.86 128 36 25 9.83 715 9.97 524 0.02 376 9.86 104 37 26 9.83 741 9.97 624 0.02 376 9.86 092 33 28 9.83 755 9.97 674 0.02 326 9.86 080 32 29 9.83 768 9.97 700 0.02 300 9.86 086 31 30 9.83 781 9.97 725 0.02 275 9.86 032 28 33 9.83 881 9.97 776		$9.83\ 581$			9.86 235	45
18 9.83 634 9.97 447 0.02 553 9.86 200 42 20 9.83 648 9.97 447 0.02 553 9.86 188 41 20 9.83 648 9.97 472 0.02 528 9.86 164 40 21 9.83 661 9.97 497 0.02 503 9.86 164 39 22 9.83 674 9.97 523 0.02 477 9.86 152 38 23 9.83 688 9.97 548 0.02 477 9.86 152 38 24 9.83 715 9.97 573 0.02 477 9.86 140 37 24 9.83 715 9.97 598 0.02 402 9.86 116 35 26 9.83 728 9.97 624 0.02 376 9.86 104 34 27 9.83 781 9.97 649 0.02 356 9.86 080 32 28 9.83 785 9.97 674 0.02 326 9.86 080 32 29 9.83 781 9.97 755 0.02 275 9.86 054 29 31 9.83 785 9.97 776					9.86 223	
19						
20 9.83 648 9.97 472 0.02 528 9.86 176 40 21 9.83 661 9.97 497 0.02 503 9.86 164 39 22 9.83 674 9.97 523 0.02 477 9.86 152 38 23 9.83 688 9.97 548 0.02 452 9.86 140 37 24 9.83 701 9.97 573 0.02 427 9.86 128 36 25 9.83 715 9.97 598 0.02 402 9.86 116 35 26 9.83 728 9.97 624 0.02 376 9.86 092 33 28 9.83 755 9.97 649 0.02 351 9.86 092 33 28 9.83 768 9.97 700 0.02 306 9.86 080 32 29 9.83 768 9.97 700 0.02 250 9.86 056 30 31 9.83 781 9.97 755 0.02 275 9.86 032 28 32 9.83 808 9.97 776 0.02 250 9.86 044 29 32 9.83 808 9.97 786						
22 9.83 674 9.97 523 0.02 477 9.86 152 38 23 9.83 688 9.97 548 0.02 452 9.86 140 37 24 9.83 715 9.97 573 0.02 402 9.86 116 35 25 9.83 715 9.97 508 0.02 402 9.86 116 35 26 9.83 728 9.97 624 0.02 376 9.86 104 34 27 9.83 755 9.97 649 0.02 351 9.86 080 32 28 9.83 768 9.97 700 0.02 300 9.86 086 31 30 9.83 781 9.97 750 0.02 250 9.86 044 29 31 9.83 795 9.97 750 0.02 250 9.86 044 29 32 9.83 808 9.97 776 0.02 224 9.86 032 28 33 9.83 808 9.97 776 0.02 224 9.86 032 28 34 9.83 848 9.97 851 0.02 149 9.85 096 27 34 9.83 861 9.97 87						
22 9.83 674 9.97 523 0.02 477 9.86 152 38 23 9.83 688 9.97 548 0.02 452 9.86 140 37 24 9.83 715 9.97 573 0.02 402 9.86 116 35 25 9.83 715 9.97 508 0.02 402 9.86 116 35 26 9.83 728 9.97 624 0.02 376 9.86 104 34 27 9.83 755 9.97 649 0.02 351 9.86 080 32 28 9.83 768 9.97 700 0.02 300 9.86 086 31 30 9.83 781 9.97 750 0.02 250 9.86 044 29 31 9.83 795 9.97 750 0.02 250 9.86 044 29 32 9.83 808 9.97 776 0.02 224 9.86 032 28 33 9.83 808 9.97 776 0.02 224 9.86 032 28 34 9.83 848 9.97 851 0.02 149 9.85 096 27 34 9.83 861 9.97 87						
23	22					
25 9.83 715 9.97 508 0.02 402 9.86 116 35 26 9.83 728 9.97 624 0.02 376 9.86 104 34 27 9.83 741 9.97 649 0.02 351 9.86 092 33 28 9.83 755 9.97 674 0.02 326 9.86 080 32 29 9.83 781 9.97 700 0.02 300 9.86 086 31 30 9.83 781 9.97 750 0.02 275 9.86 056 30 31 9.83 795 9.97 750 0.02 250 9.86 044 29 32 9.83 808 9.97 776 0.02 224 9.86 032 28 33 9.83 821 9.97 850 0.02 199 9.86 020 27 34 9.83 848 9.97 851 0.02 149 9.85 996 25 36 9.83 861 9.97 877 0.02 149 9.85 996 25 36 9.83 861 9.97 877 0.02 149 9.85 996 25 37 9.83 874 9.97 902	23					
26 9.83 728 9.97 624 0.02 376 9.86 104 34 27 9.83 741 9.97 649 0.02 351 9.86 092 33 28 9.83 755 9.97 700 0.02 300 9.86 080 32 29 9.83 768 9.97 700 0.02 300 9.86 068 31 30 9.83 781 9.97 725 0.02 275 9.86 056 30 31 9.83 781 9.97 776 0.02 250 9.86 044 29 32 9.83 808 9.97 776 0.02 224 9.86 032 28 33 9.83 821 9.97 801 0.02 199 9.86 020 27 34 9.83 848 9.97 851 0.02 149 9.85 008 26 35 9.83 848 9.97 857 0.02 149 9.85 966 25 36 9.83 861 9.97 877 0.02 149 9.85 962 25 36 9.83 874 9.97 902 0.02 098 9.85 972 23 38 9.83 877 9.97 977						
27 9.83 741 9.97 649 0.02 351 9.86 092 33 28 9.83 755 9.97 674 0.02 326 9.86 080 32 29 9.83 768 9.97 700 0.02 300 9.86 068 31 30 9.83 781 9.97 725 0.02 275 9.86 056 30 31 9.83 795 9.97 750 0.02 250 9.86 044 29 32 9.83 808 9.97 776 0.02 294 9.86 032 28 33 9.83 821 9.97 801 0.02 199 9.86 020 27 34 9.83 834 9.97 826 0.02 174 9.86 008 26 35 9.83 841 9.97 877 0.02 123 9.85 996 25 36 9.83 861 9.97 877 0.02 123 9.85 996 25 36 9.83 874 9.97 902 0.02 098 9.85 972 23 38 9.83 891 9.97 978 0.02 047 9.85 948 21 40 9.83 914 9.97 978						
29 9.83 768 9.97 700 0.02 300 9.86 068 31 30 9.83 781 9.97 725 0.02 275 9.86 056 30 31 9.83 795 9.97 750 0.02 250 9.86 044 29 32 9.83 808 9.97 776 0.02 224 9.86 032 28 33 9.83 831 9.97 801 0.02 199 9.86 008 26 34 9.83 834 9.97 851 0.02 149 9.85 996 25 36 9.83 861 9.97 851 0.02 149 9.85 996 25 36 9.83 874 9.97 877 0.02 123 9.85 996 25 37 9.83 874 9.97 902 0.02 098 9.85 972 23 39 9.83 901 9.97 953 0.02 047 9.85 948 21 40 9.83 914 9.97 978 0.02 022 9.85 936 20 41 9.83 927 9.98 030 0.01 997 9.85 942 19 43 9.83 967 9.98 079	27					
30 9.83 781 9.97 725 0.02 275 9.86 056 30 31 9.83 795 9.97 750 0.02 250 9.86 044 29 32 9.83 808 9.97 776 0.02 250 9.86 032 28 33 9.83 821 9.97 801 0.02 199 9.86 032 28 34 9.83 834 9.97 826 0.02 174 9.86 008 26 35 9.83 848 9.97 877 0.02 129 9.85 996 25 36 9.83 861 9.97 877 0.02 123 9.85 996 25 36 9.83 874 9.97 902 0.02 098 9.85 972 23 38 9.83 901 9.97 973 0.02 073 9.85 900 22 39 9.83 901 9.97 978 0.02 047 9.85 948 21 40 9.83 914 9.97 978 0.02 022 9.85 936 20 41 9.83 927 9.98 003 0.01 997 9.85 924 19 42 9.83 994 9.98 079	28					
31 9.83 795 9.97 750 0.02 250 9.86 044 29 32 9.83 808 9.97 776 0.02 294 9.86 032 28 33 9.83 821 9.97 801 0.02 199 9.86 020 27 34 9.83 834 9.97 826 0.02 174 9.86 008 26 35 9.83 848 9.97 877 0.02 123 9.85 996 25 36 9.83 861 9.97 877 0.02 123 9.85 984 24 37 9.83 874 9.97 902 0.02 098 9.85 972 23 38 9.83 891 9.97 973 0.02 073 9.85 906 22 39 9.83 901 9.97 973 0.02 047 9.85 936 20 40 9.83 914 9.97 978 0.02 022 9.85 936 20 41 9.83 927 9.98 003 0.01 997 9.85 924 19 42 9.83 940 9.98 079 0.01 971 9.85 912 18 43 9.83 954 9.98 079						
32 9.83 808 9.97 776 0.02 224 9.86 032 28 33 9.83 821 9.97 801 0.02 199 9.86 020 27 34 9.83 834 9.97 826 0.02 174 9.86 008 26 35 9.83 848 9.97 851 0.02 149 9.85 996 25 36 9.83 861 9.97 877 0.02 149 9.85 996 25 37 9.83 874 9.97 902 0.02 098 9.85 972 23 38 9.83 801 9.97 978 0.02 073 9.85 960 22 39 9.83 901 9.97 978 0.02 022 9.85 936 20 41 9.83 914 9.97 978 0.02 022 9.85 936 20 41 9.83 940 9.98 029 0.01 997 9.85 924 14 43 9.83 954 9.98 079 0.01 971 9.85 900 17 44 9.83 980 9.98 104 0.01 896 9.85 876 15 45 9.83 980 9.98 130						
33 9.83 821 9.97 801 0.02 199 9.86 020 27 34 9.83 834 9.97 826 0.02 174 9.86 008 26 35 9.83 848 9.97 851 0.02 149 9.85 996 25 36 9.83 861 9.97 877 0.02 123 9.85 984 24 37 9.83 874 9.97 902 0.02 098 9.85 972 23 38 9.83 887 9.97 927 0.02 073 9.85 960 22 39 9.83 901 9.97 978 0.02 047 9.85 948 21 40 9.83 914 9.97 978 0.02 022 9.85 936 20 41 9.83 927 9.98 003 0.01 997 9.85 924 19 42 9.83 940 9.98 054 0.01 997 9.85 924 19 43 9.83 967 9.98 059 0.01 971 9.85 982 18 45 9.83 980 9.98 104 0.01 896 9.85 876 15 46 9.83 980 9.98 130						
34 9.83 834 9.97 826 0.02 174 9.86 008 26 35 9.83 848 9.97 851 0.02 149 9.85 996 25 36 9.83 861 9.97 877 0.02 123 9.85 984 24 37 9.83 874 9.97 902 0.02 098 9.85 972 23 38 9.83 887 9.97 927 0.02 073 9.85 960 22 39 9.83 901 9.97 978 0.02 047 9.85 948 21 40 9.83 914 9.97 978 0.02 022 9.85 936 20 41 9.83 927 9.98 003 0.01 997 9.85 924 19 42 9.83 954 9.98 054 0.01 997 9.85 912 18 43 9.83 954 9.98 079 0.01 971 9.85 900 17 44 9.83 996 9.98 079 0.01 946 9.85 800 16 45 9.83 993 9.98 130 0.01 870 9.85 861 15 46 9.83 993 9.98 180						
36 9.83 861 9.97 877 0.02 123 9.85 984 24 37 9.83 874 9.97 902 0.02 098 9.85 972 23 38 9.83 887 9.97 927 0.02 073 9.85 960 22 39 9.83 901 9.97 953 0.02 047 9.85 948 21 40 9.83 914 9.97 978 0.02 022 9.85 936 20 41 9.83 927 9.98 003 0.01 997 9.85 924 19 42 9.83 940 9.98 029 0.01 971 9.85 900 17 43 9.83 954 9.98 079 0.01 921 9.85 880 17 44 9.83 967 9.98 079 0.01 921 9.85 886 16 45 9.83 980 9.98 130 0.01 870 9.85 864 14 47 9.84 006 9.98 155 0.01 845 9.85 851 13 48 9.84 033 9.98 231 0.01 794 9.85 827 11 50 9.84 046 9.98 231						
37 9.83 874 9.97 902 0.02 098 9.85 972 23 38 9.83 887 9.97 927 0.02 073 9.85 900 22 39 9.83 901 9.97 953 0.02 047 9.85 948 21 40 9.83 914 9.97 978 0.02 022 9.85 936 20 41 9.83 927 9.98 003 0.01 997 9.85 924 19 42 9.83 940 9.98 054 0.01 946 9.85 900 17 43 9.83 954 9.98 054 0.01 946 9.85 888 16 45 9.83 980 9.98 104 0.01 896 9.85 876 15 46 9.83 993 9.98 130 0.01 896 9.85 861 14 47 9.84 060 9.98 185 0.01 845 9.85 831 13 48 9.84 020 9.98 180 0.01 820 9.85 831 13 49 9.84 046 9.98 231 0.01 794 9.85 815 10 50 9.84 046 9.98 236			9.97 851	0.02 149	9.85 996	25
38 9.83 887 9.97 927 0.02 073 9.85 900 22 40 9.83 914 9.97 978 0.02 022 9.85 938 21 40 9.83 914 9.97 978 0.02 022 9.85 938 20 41 9.83 927 9.98 003 0.01 997 9.85 924 19 42 9.83 940 9.98 029 0.01 971 9.85 902 18 43 9.83 954 9.98 079 0.01 946 9.85 900 17 44 9.83 980 9.98 104 0.01 896 9.85 876 15 45 9.83 980 9.98 104 0.01 896 9.85 876 15 46 9.83 993 9.98 130 0.01 870 9.85 864 14 47 9.84 033 9.98 236 0.01 820 9.85 839 12 49 9.84 033 9.98 236 0.01 794 9.85 827 11 50 9.84 046 9.98 231 0.01 769 9.85 815 10 51 9.84 059 9.98 236						
39 9.83 901 9.97 953 0.02 047 9.85 948 21 40 9.83 914 9.97 978 0.02 022 9.85 936 20 41 9.83 927 9.98 003 0.01 997 9.85 924 19 42 9.83 940 9.98 029 0.01 971 9.85 912 18 43 9.83 954 9.98 054 0.01 946 9.85 900 17 44 9.83 967 9.98 079 0.01 921 9.85 888 16 45 9.83 980 9.98 104 0.01 896 9.85 861 15 46 9.83 993 9.98 130 0.01 896 9.85 851 13 47 9.84 006 9.98 155 0.01 845 9.85 851 13 48 9.84 020 9.98 180 0.01 820 9.85 832 11 50 9.84 046 9.98 231 0.01 769 9.85 827 11 51 9.84 059 9.98 231 0.01 769 9.85 791 8 52 9.84 072 9.98 231						
40 9.83 914 9.97 978 0.02 022 9.85 936 20 41 9.83 927 9.98 003 0.01 997 9.85 924 19 42 9.83 940 9.98 029 0.01 971 9.85 912 18 43 9.83 954 9.98 054 0.01 946 9.85 900 17 44 9.83 967 9.98 079 0.01 921 9.85 888 16 45 9.83 993 9.98 104 0.01 896 9.85 876 15 46 9.83 993 9.98 130 0.01 870 9.85 864 14 47 9.84 006 9.98 185 0.01 820 9.85 831 13 48 9.84 020 9.98 236 0.01 794 9.85 827 11 50 9.84 046 9.98 231 0.01 769 9.85 815 10 51 9.84 072 9.98 286 0.01 744 9.85 803 9 52 9.84 072 9.98 286 0.01 749 9.85 791 8 53 9.84 085 9.98 332 <						
41 9.83 927 9.98 003 0.01 997 9.85 924 19 42 9.83 940 9.98 029 0.01 971 9.85 912 18 43 9.83 954 9.98 054 0.01 946 9.85 900 17 44 9.83 957 9.98 079 0.01 921 9.85 888 16 45 9.83 980 9.98 104 0.01 896 9.85 876 15 46 9.83 993 9.98 130 0.01 870 9.85 864 14 47 9.84 006 9.98 155 0.01 820 9.85 831 13 48 9.84 020 9.98 180 0.01 820 9.85 827 11 50 9.84 046 9.98 231 0.01 769 9.85 815 10 51 9.84 046 9.98 231 0.01 769 9.85 815 10 51 9.84 072 9.98 281 0.01 794 9.85 803 10 52 9.84 072 9.98 236 0.01 744 9.85 803 10 53 9.84 085 9.98 332						l .
43 9.83 954 9.98 054 0.01 946 9.85 900 17 44 9.83 967 9.98 079 0.01 921 9.85 888 16 45 9.83 980 9.98 104 0.01 806 9.85 876 15 46 9.83 993 9.98 130 0.01 870 9.85 864 14 47 9.84 006 9.98 155 0.01 845 9.85 851 13 48 9.84 033 9.98 206 0.01 794 9.85 827 11 50 9.84 046 9.98 231 0.01 769 9.85 815 10 51 9.84 059 9.98 256 0.01 744 9.85 803 9 52 9.84 085 9.98 237 0.01 693 9.85 791 8 53 9.84 085 9.98 307 0.01 693 9.85 779 7 54 9.84 098 9.98 332 0.01 668 9.85 766 6 55 9.84 125 9.98 383 0.01 677 9.85 730 3 56 9.84 125 9.98 383						
44 9.83 967 9.98 079 0.01 921 9.85 888 16 45 9.83 980 9.98 104 0.01 896 9.85 876 15 46 9.83 993 9.98 130 0.01 870 9.85 864 14 47 9.84 006 9.98 155 0.01 845 9.85 851 13 48 9.84 020 9.98 180 0.01 820 9.85 827 11 50 9.84 033 9.98 206 0.01 794 9.85 827 11 50 9.84 046 9.98 231 0.01 769 9.85 815 10 51 9.84 059 9.98 236 0.01 744 9.85 803 9 52 9.84 072 9.98 281 0.01 719 9.85 791 8 53 9.84 085 9.98 337 0.01 693 9.85 779 7 54 9.84 085 9.98 333 0.01 643 9.85 754 5 55 9.84 112 9.98 383 0.01 643 9.85 754 5 56 9.84 125 9.98 383						
45 9.83 980 9.98 104 0.01 896 9.85 876 15 46 9.83 993 9.98 130 0.01 870 9.85 864 14 47 9.84 006 9.98 155 0.01 845 9.85 861 13 48 9.84 020 9.98 180 0.01 820 9.85 839 12 49 9.84 033 9.98 206 0.01 794 9.85 827 11 50 9.84 046 9.98 231 0.01 769 9.85 815 10 51 9.84 059 9.98 236 0.01 744 9.85 803 9 52 9.84 072 9.98 281 0.01 719 9.85 791 8 53 9.84 085 9.98 337 0.01 693 9.85 779 7 54 9.84 098 9.98 332 0.01 668 9.85 754 5 55 9.84 112 9.98 383 0.01 643 9.85 734 5 56 9.84 125 9.98 383 0.01 617 9.85 730 3 57 9.84 138 9.98 408 0				0.01 946		
46 9.83 993 9.98 130 0.01 870 9.85 864 14 47 9.84 006 9.98 155 0.01 845 9.85 851 13 48 9.84 020 9.98 180 0.01 820 9.85 839 12 49 9.84 033 9.98 206 0.01 794 9.85 837 11 50 9.84 046 9.98 231 0.01 769 9.85 815 10 51 9.84 059 9.98 236 0.01 744 9.85 803 9 52 9.84 072 9.98 281 0.01 719 9.85 791 8 53 9.84 085 9.98 307 0.01 638 9.85 779 7 54 9.84 098 9.98 332 0.01 668 9.85 766 6 55 9.84 112 9.98 383 0.01 617 9.85 742 4 56 9.84 125 9.98 383 0.01 617 9.85 742 4 57 9.84 138 9.98 408 0.01 592 9.85 730 3 58 9.84 151 9.98 433 0.						
47 9.84 006 9.98 155 0.01 845 9.85 851 13 48 9.84 020 9.98 180 0.01 820 9.85 839 12 49 9.84 033 9.98 206 0.01 794 9.85 827 11 50 9.84 046 9.98 231 0.01 769 9.85 815 10 51 9.84 059 9.98 236 0.01 744 9.85 803 9 52 9.84 072 9.98 281 0.01 719 9.85 791 8 53 9.84 085 9.98 307 0.01 693 9.85 779 7 54 9.84 098 9.98 332 0.01 663 9.85 779 7 54 9.84 112 9.98 357 0.01 643 9.85 754 5 55 9.84 112 9.98 383 0.01 617 9.85 742 4 57 9.84 125 9.98 383 0.01 617 9.85 742 4 57 9.84 151 9.98 438 0.01 592 9.85 718 2 59 9.84 164 9.98 458 0.0						
49 9.84 033 9.98 206 0.01 794 9.85 827 11 50 9.84 046 9.98 231 0.01 769 9.85 815 10 51 9.84 059 9.98 236 0.01 744 9.85 803 9 52 9.84 072 9.98 281 0.01 719 9.85 791 8 53 9.84 085 9.98 307 0.01 698 9.85 779 7 54 9.84 098 9.98 332 0.01 668 9.85 766 6 55 9.84 112 9.98 337 0.01 643 9.85 754 5 56 9.84 125 9.98 383 0.01 617 9.85 742 4 57 9.84 138 9.98 408 0.01 592 9.85 730 3 58 9.84 151 9.98 433 0.01 567 9.85 718 2 59 9.84 164 9.98 458 0.01 542 9.85 706 4 60 9.84 177 9.98 484 0.01 516 9.85 693 0	47	9.84 006	9.98 155	0.01 845	9.85851	13
50 9.84 046 9.98 231 0.01 769 9.85 815 10 51 9.84 059 9.98 256 0.01 744 9.85 803 9 52 9.84 072 9.98 281 0.01 719 9.85 791 8 53 9.84 085 9.98 307 0.01 693 9.85 779 7 54 9.84 098 9.98 332 0.01 668 9.85 766 6 55 9.84 112 9.98 387 0.01 643 9.85 754 5 56 9.84 125 9.98 383 0.01 617 9.85 742 4 57 9.84 138 9.98 408 0.01 592 9.85 700 3 58 9.84 151 9.98 433 0.01 567 9.85 718 2 59 9.84 164 9.98 458 0.01 542 9.85 706 1 60 9.84 177 9.98 484 0.01 516 9.85 693 0						
51 9.84 059 9.98 256 0.01 744 9.85 803 9 52 9.84 072 9.98 281 0.01 719 9.85 791 8 53 9.84 085 9.98 307 0.01 693 9.85 779 7 54 9.84 008 9.98 332 0.01 668 9.85 766 6 55 9.84 112 9.98 357 0.01 643 9.85 754 5 56 9.84 125 9.98 383 0.01 617 9.85 742 4 57 9.84 138 9.98 408 0.01 592 9.85 770 3 58 9.84 151 9.98 433 0.01 567 9.85 718 2 59 9.84 164 9.98 458 0.01 542 9.85 706 1 60 9.84 177 9.98 484 0.01 516 9.85 693 0						
52 9.84 072 9.98 281 0.01 719 9.85 791 8 53 9.84 085 9.98 307 0.01 693 9.85 779 7 54 9.84 098 9.98 332 0.01 668 9.85 766 6 55 9.84 112 9.98 357 0.01 643 9.85 754 5 56 9.84 125 9.98 383 0.01 617 9.85 742 4 57 9.84 138 9.98 408 0.01 592 9.85 730 3 58 9.84 151 9.98 433 0.01 567 9.85 718 2 59 9.84 164 9.98 458 0.01 542 9.85 706 1 60 9.84 177 9.98 484 0.01 516 9.85 693 0						
53 9.84 085 9.98 307 0.01 693 9.85 779 7 54 9.84 098 9.98 332 0.01 668 9.85 766 6 55 9.84 112 9.98 357 0.01 643 9.85 754 5 56 9.84 125 9.98 383 0.01 617 9.85 742 4 57 9.84 138 9.98 408 0.01 592 9.85 730 3 58 9.84 151 9.98 433 0.01 567 9.85 718 2 59 9.84 164 9.98 458 0.01 542 9.85 706 1 60 9.84 177 9.98 484 0.01 516 9.85 693 0		0.00				
54 9.84 098 9.98 332 0.01 668 9.85 766 6 55 9.84 112 9.98 357 0.01 643 9.85 754 5 56 9.84 125 9.98 383 0.01 617 9.85 742 4 57 9.84 138 9.98 408 0.01 592 9.85 730 3 58 9.84 151 9.98 433 0.01 567 9.85 718 2 59 9.84 164 9.98 458 0.01 542 9.85 706 1 60 9.84 177 9.98 484 0.01 516 9.85 693 0						7
55 9.84 112 9.98 357 0.01 643 9.85 754 5 56 9.84 125 9.98 383 0.01 617 9.85 742 4 57 9.84 138 9.98 408 0.01 592 9.85 730 3 58 9.84 151 9.98 433 0.01 567 9.85 718 2 59 9.84 164 9.98 458 0.01 542 9.85 706 1 60 9.84 177 9.98 484 0.01 516 9.85 693 0	54	9.84 098	9.98 332		9.85 766	6
57 9.84 138 9.98 408 0.01 592 9.85 730 3 58 9.84 151 9.98 433 0.01 567 9.85 718 2 59 9.84 164 9.98 458 0.01 542 9.85 706 1 60 9.84 177 9.98 484 0.01 516 9.85 693 0						5
59 9.84 164 9.98 458 0.01 542 9.85 706 1 60 9.84 177 9.98 484 0.01 516 9.85 693 0						4 2
59 9.84 164 9.98 458 0.01 542 9.85 706 1 60 9.84 177 9.98 484 0.01 516 9.85 693 0						$\frac{3}{2}$
						1
L. Cos. L. Cot. L. Tan. L. Sin.	60	9.84 177	9.98 484	0.01 516	9.85 693	0
		L. Cos.	L. Cot.	L. Tan.	L. Sin.	,

	44								
,	L. Sin.	L. Tan.	L. Cot.	L. Cos.					
0	9,84 177	9.98 484	0.01 516	9.85 693	60				
1	9.84 190	9.98 509	0.01 491	9.85 681	59				
2	9.84 203	$9.98\ 534$	0.01 466	9.85 669	58				
3	9.84 216	9.98 560	0.01 440	9.85 657	57				
4 5	9.84 229 9.84 242	9.98 585 9.98 610	0.01 415 0.01 390	9.85 645 9.85 632	56 55				
6	9.84 255	9.98 635	0.01 365	9.85 620	54				
7	9.84 269	9.98 661	0.01 339	9.85 608	53				
8	9.84 282	9.98 686	0.01 314	9.85 596	52				
9	9.84 295	9.98 711	0.01 289	9.85 583	51				
10	9.84 308	9.98 737	0.01 263	9.85 571	50				
11	9.84 321	9.98 762	0.01 238	9.85 559	49				
12 13	9.84 334 9.84 347	9.98 787 9.98 812	0.01 213 0.01 188	9.85 547 9.85 534	48 47				
14	9.84 360	9.98 838	0.01 163	9.85 522	46				
15	9.84 373	9.98 863	0.01 137	9.85 510	45				
16	$9.84\ 385$	9.98 888	0.01 112	9.85 497	44				
17	9.84 398	9.98 913	0.01 087	9.85 485	43				
18 19	9.84 411 9.84 424	9.98 939 9.98 964	$0.01\ 061$ $0.01\ 036$	9.85 473 9.85 460	42				
20	9.84 437	9.98 989	0.01 0.01	9.85 448	40				
21	9.84 450	9.99 015	0.01 011	9.85 436	39				
22	9.84 463	9.99 040	0.00 960	9.85 423	38				
23	9.84 476	9.99 065	0.00 935	9.85 411	37				
24	$9.84\ 489$	9.99 090	0.00 910	9.85 399	36				
25	9.84 502	9.99 116	0.00 884	9.85 386	35 34				
$\frac{26}{27}$	9.84 515 9.84 528	9.99 141 9.99 166	$0.00859 \\ 0.00834$	9.85 374 9.85 361	33				
28	9.84 540	9.99 191	0.00 809	9.85 349	32				
29	9.84 553	9.99 217	0.00 783	9.85 337	31				
30	9.84 566	9.99 242	0.00 758	9.85 324	30				
31	9.84 579	9.99 267	0.00 733	9.85 312	29				
32	9.84 592	9.99 293	0.00 707	9.85 299	28				
33 34	9.84 605 9.84 618	9.99 318 9.99 343	0.00 682 0.00 657	9.85 287 9.85 274	27 26				
35	9.84 630	9.99 368	0.00 632	9.85 262	25				
36	9.84 643	9.99 394	0.00 606	9.85 250	24				
37	$9.84\ 656$	9.99 419	0.00 581	9.85 237	23				
38	9.84 669	9.99 444	0.00 556	9.85 225	22 21				
39	9.84 682	9.99 469	0.00 531	9.85 212	20				
40	9.84 694	9.99 495	0.00 505	9.85 200	19				
41	9.84 707 9.84 720	9.99 520 9.99 545	$0.00480 \\ 0.00455$	9.85 187 9.85 175	18				
43	9,84 733	9.99 570	0.00 430	9.85 162	17				
44	9.81.745	9.99 596	0.00 404	9.85 150	16				
45	9.84 758	9.99 621	0.00 379	9.85 137	15				
46 47	9.84 771 9.84 784	9,99 646 9,99 672	0.00 354 0.00 328	9.85 125 9.85 112	14 13				
48	9.84 796	9.99 697	0.00 328	9.85 100	12				
49	9.84 809	9.99 722	0.00 278	9.85 087	11				
50	9.84 822	9.99 747	0.00 253	9.85 074	10				
51	9.84 835	9.99 773	0.00 227	9.85 062	9				
52	9.84 847	9.99 798	0.00 202	9.85 049	8				
53 54	9.84 860 9.84 873	9,99 823 9,99 848	0.00 177 0.00 152	9.85 037 9.85 024	7 6				
55	9.84 885	9.99 874	0.00 126	9.85 024	5				
56	9.84 898	9.99 899	0.00 101	9.84 999	4				
57	9.84 911	9.99 924	0.00 076	9,84 986	3				
58	9.84 923	9.99 949	0.00 051	9.84 974	2				
59 60	9.84 936	9.99 975	0.00 025	9.84 961	0				
00		10,00 000	0.00 000	9.84 949	<u> </u>				
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	,				

III.

FOUR-PLACE TABLES.

- (1) LOGARITHMS OF NUMBERS.
- (2) Logarithms of the Sine, Cosine, Tangent, and Cotangent, at Intervals of Ten Minutes from 0° to 90° .
- (3) Values of the Sine, Cosine, Tangent, and Cotangent, at Intervals of Ten Minutes from 0° to 90° .

N	0	1	2	3	4	5	6	7	8	9
0	0000	0000	3010	4771	6021	6990	7782	8451	9031	9542
1	0000	0414	0792	1139	1461	1761	2041	2304	2553	2788
2	3010	3000	3424	3617	3802	3979	4150	4314	4472	4624
2 3	4771	4914	5051	5185	5315	5441	5563	5682	5798	5911
4	6021	6128	6232	6335	6435	6532	6628	6721	6812	6902
5	6990	7076	7160	7243	7324	7404	7482	7559	7634	7709
6	7782	7853	7924	7993	8062	8129	8195	8261	8325	8388
7	8451	8513	8573	8633	8692	8751	8808	8865	8921	8976
8	9031	9085	9138	9191	9243	9294	9345	9395	9445	9494
9	9542	9590	9638	9685	9731	9777	9823	9868	9912	9956
10	0000	0043	0086	0128	0170	0212	0253	0294	0334	0374
11	0414	0453	0492	0531	0569	0607	0645	0682	0719	0755
12	0792	0828	0864	0899	0934	0969	1004	1038	1072	1106
13	1139	1173	1206	1239	1271	1303	1335	1367	1399	1430
14	1461	1492	1523	1553	1584	1614	1644	1673	1703	1732
15	1761	1790	1818	1847	1875	1903	1931	1959	1987	2014
16	2041	2068	2095	2122	2148	2175	2201	2227	2253	2279
17	2304	2330	2355	2380	2405	2430	2455	2480	2504	2529
18	2553	2577	2601	2625	2648	2672	2695	2718	2742	2765
19	2788	2810	2833	2856	2878	2900	2923	2945	2967	2989
20	3010	3032	3054	3075	3096	3118	3139	3160	3181	3201
21	3222	3243	3263	3284	3304	3324	3345	3365	3385	3404
22	3424	3114	3464	3483	3502	3522	3541	3560	3579	3598
23	3617	3636	3655	3674	3692	3711	3729	3747	3766	3784
24	3802	3820	3838	3856	3874	3892	3909	3927	3945	3962
25	3979	3997	4014	4031	4048	4065	4082	4099	4116	4133
26	4150	4166	4183	4200	4216	4232	4249	4265	4281	4298
27	4314	4330	4346	4362	4378	4393	4409	4425	4440	4456
28	4472	4487	4502	4518	4533	4548	4564	4579	4594	4609
29	4624	4639	4654	4669	4683	4698	4713	4728	4742	4757
30	4771	4786	4800	4814	4829	4843	4857	4871	4886	4900
31	4914	4928	4942	4955	4969	4983	4997	5011	5024	5038
32	5051	5065	5079	5092	5105	5119	5132	5145	5159	5172
33 34	5185 5315	$5198 \\ 5328$	5211 5340	5224 5353	5237 5366	5250 5378	5263 5391	5276 5403	5289 5416	5302 5428
35	5441	5453	5465	5478	5490	5502	5514	5527	5539	5551
36	5563	5575	5587	5599	5611	5623	5635	5647	5658	5670
37	5682	5694	5705	5717	5729	5740	5752	5763	5775	5786
38	5798	5809	5821	5832	5843	5855	5866	5877	5888	5899
39	5911	5922	5933	5944	5955	5966	5977	5988	5999	6010
40	6021	6031	6042	6053	6064	6075	6085	6096	6107	6117
41	6128	6138	6149	6160	6170	6180	6191	6201	6212	6222
42	6232	6243	6253	6263	6274	6284	6294	6304	6314	6325
43	6335	6345	6355	6365	6375	6385	6395	6405	6415	6425
41	6.235	6111	6454	6464	6474	6484	6493	6503	6513	6522
45	6532	6542	6551	6561	6571	6580	6590	6599	6609	6618
46	6628	6637	6616	6656	6665	6675	6684	6693	6702	6712
47	6721	6730	6739	6749	6758	-6767	6776	6785	6794	6803
48	6812	6821	6830	6839	6848	6857	6866	6875	6884	6893
49	6902	6911	6920	6928	6937	6946	6955	6964	6972	6981
						-	6	7		

N	0	1	2	3	4	5	6	7	8	9
50	6990	6998	7007	7016	7024	7033	7042	7050	7059	7067
51	7076	7084	7093	7101	7110	7118	7126	7135	7143	7152
52 53	$7160 \\ 7243$	$7168 \\ 7251$	$7177 \\ 7259$	$7185 \\ 7267$	7193 - 7275	7202 7284	$7210 \\ 7292$	$\frac{7218}{7300}$	$7226 \\ 7308$	$7235 \\ 7316$
54	7324	7332	7340	7348	7356	7364	7372	7380	7388	7396
55	7404	7412	7419	7427	7435	7443	7451	7459	7466	7474
56	7482	7490	7497	7505	7513	7520	7528	7536	7543	7551
57	-7559	7566	7574	7582	7589	7597	7604	7612	7619	7627
-58	7634	7642	7649	7657	7664	7672	7679	7686	7694	7701
59	7709	7716	7723	7731	7738	7745	7752	7760	7767	7774
60 61	7782 7853	7789 7860	7796 7868	$\frac{7803}{7875}$	$\frac{7810}{7882}$	7818 7889	$7825 \\ 7896$	$\frac{7832}{7903}$	$7839 \\ 7910$	7846 7917
62	7924	7931	7938	7945	$\frac{1002}{7952}$	7959	7966	7973	7980	7987
63	7993	8000	8007	8014	8021	8028	8035	8041	8048	8055
64	8062	8069	8075	8082	8089	8096	8102	8109	8116	8122
65	8129	8136	8142	8149	8156	8162	8169	8176	8182	8189
66	8195	8202	8209	8215	8222	8228	8235	8241	8248	8254
67	8261	8267	8274	8280	8287	8293	8299	8306	8312	8319
68	8325 8388	8331	8338	8344	8351	8357 8420	8363	$8370 \\ 8432$	8376 8439	8382
69		8395	8401	8407	8414		8426			8145
70 71	$8451 \\ 8513$	8457	8463	8470 8531	8476 8537	8482 8543	8488 8549	8494 8555	8500	8506 8567
72	8573	8519 8579	8525 8585	8591	8597	8603	8609	8615	$8561 \\ 8621$	8627
73	8633	8639	8645	8651	8657	8663	8669	8675	8681	8686
74	8692	8698	8704	8710	8716	8722	8727	8733	8739	8745
75	8751	8756	8762	8768	8774	8779	8785	8791	8797	8802
76	8808	8814	8820	8825	8831	8837	8842	8848	8854	8859
77	8865	8871	8876	8882	8887	8893	8899	8904	8910	8915
78 79	8921 8976	8927 8982	8932 8987	8938 8993	8943 8998	8949 9004	8954 9009	8960 9015	8965 9020	8971 9025
80	9031	9036	9042	9047	9053	9058	9063	9069	9074	9079
81	9085	9090	9096	9101	9106	9112	9117	9122	9128	9133
82	9138	9143	9149	9154	9159	9165	9170	9175	9180	9186
83	9191	9196	9201	9206	9212	9217	9222	9227	9232	9238
84	9243	9248	9253	9258	9263	9269	9274	9279	9284	9289
85	9294	9299	9304	9309	9315	9320	9325	9330	9335	9340
86 87	9345 9395	9350 9400	935 5 9405	9360 9410	9365 9415	9370 9420	$9375 \\ 9425$	9380 9430	9385 9435	9390 9440
88	9595	9450	9455	9460	9415	9469	9474	9479	9484	9489
89	9494	9499	9504	9509	9513	9518	9523	9528	9533	9538
90	9542	9547	9552	9557	9562	9566	9571	9576	9581	9586
91	9590	9595	9600	9605	9609	9614	9619	9624	9628	9633
92	9638	9643	9647	9652	9657	9661	9666	9671	9675	9680
93	9685	9689 9736	9694 9741	9699	9703	9708	9713	9717	9722	9727
94	9731			9745	9750	9754	9759	9763	9768	9773
95	9777 9823	9782	$9786 \\ 9832$	9791 9836	9795 9841	9800	9805 985 0	9809 9854	9814	9818
96 97	9823 9868	$9827 \\ 9872$	9852	9881	9841 9886	9845 9890	9894	9899	9859 9903	9863 9908
98	9912	9917	9921	9926	9930	9934	9939	9943	9948	9952
99	9956	9961	9965	9969	9974	9978	9983	9987	9991	9996
N	0	1	2	3	4	5	6	7	8	9

0 1	L. Sin.	L. Tan.	L. Cot.	L. Cos.		
0 00	œ	x 0	∞	10,0000	00	90
10	7.4637	7.4637	2.5363	0000	50	•
20	7648	7648	2352	0000	40	
30	9408	9409	0591	0000	30	
40	8.0658	8.0658	1.9342	0000	20	
50	1627	1627	8373	0000	10	
1 00	8.2419	8.2419	1.7581	9.9999	00	89
10	3088	3089	6911	9999	50	
20	3668	3669	6331	9999	40	
30	4179	4181	5819	9999	30.	
40	4637	4638	5362	9998	20	
50	5050	5053	4947	9998	10	
2 00	8.5428	8.5431	1.4569	9.9997	00	88
10	5776	5779	4221	9997	50	
20	6097	6101	3899	9996	40	
30	6397	6401	3599	9996	30	
40	6677	6682	3318	9995	20	
50	6940	6945	3055	9995	10	
3 00	8.7188	8.7194	1.2806	9,9994	00	87
$\frac{10}{20}$	7423	7429 7652	2571 2348	9993	50	
30	7645 7857	7865	2048	9993 9092	40 30	
40	8059	8067	1933	9091	20	
50	8251	8261	1739	9990	10	
4 00	8.8436	8.8446	1.1554	9,9989	-00	86
10	8613	8624	1376	9989	50	00
20	8783	8795	1205	9988	40	
30	8946	8960	1040	9987	30	
40	9104	9118	0882	9986	20	
50	9256	9272	0728	9985	10	
5 00	8.9403	8.9420	1.0580	9.9983	00	85
10	9545	9563	0437	9982	50	
20	9682	9701	0209	9981	40	
30	9816	9836	0164	9980	30	
40	9945	9966	0034	9979	20	
50	9.0070	9,0003	0.9907	9077	10	
6 00	9.0192	9.0216	0.9784	9.9976	00	84
10	0311	0336	9664	9975	50	
20	0426	0453	9547	9973	40	
30	0539	0567	9433	9972	30 20	
40 50	$0648 \\ 0755$	0678 0786	9322 9214	9971 9969	10	
						0.0
7 00	9,0859	9.0891	0.9109	9.9968	50	83
10 20	0961 1060	0995 1096	9005 8904	9966 9961	50 40	
30	1157	1194	880G	9963	30	
40	1252	1291	8709	9961	20	
50	1345	1385	8615	9959	10	
8 (0)	9.1436	9.1478	0,8522	9.9958	00	82
10	1525	1569	8431	9956	50	
20	1612	1658	8312	9954	40	
30	1697	1745	8255	9952	-30	
40	1781	1831	8169	9950	20	
50	1863	1915	8085	9948	10	
9 00	9.1943	9.1997	0,8003	9.9916	00	81
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	'	0

0 /	L. Sin.	L. Tan.	L. Cot.	L. Cos.		
9 00	9.1943	9.1997	0.8003	9,9946	00	81
10		2078	7922	9944	50	
20		2158	7842	9942	40	
₆ 30		2236	7764	9940	30	
40		2313	7687	9938	20	
50	2324	2389	7611	9936	10	
10 00		9.2463	0.7537	9.9934	00	80
10		2536	7464	9931	50	
20		2609	7391	9929	40	
30	2606	2680	7320	9927	30	
40 50		2750 2819	$7250 \\ 7181$	9924 9922	20 10	- 1
				9.9919	-00	79
11 00		9.2887	0.7113	9917	50	19
$\frac{10}{20}$		2953 3020	7047 6980	9914	40	
30		3020	6915	9912	30	
40		3149	6851	9909	20	
50		3212	6788	9907	10	
12 00		9.3275	0.6725	9.9904	-00	78
10		3336	6664	9901	50	
20		3397	6603	9899	40	
30		3458	6542	9896	30	
40		3517	6483	9893	20	
50	3466	3576	6424	9890	10	
13 00	9.3521	9.3634	0.6366	9.9887	-00	77
10		3691	6309	9884	50	
20		3748	6252	9881	40	- 1
30		3804	6196	9878	30	
40		3859	6141	9875	20	
50	3786	3914	6086	9872	10	
14 00	9.3837	9.3968	0.6032	9.9869	00	76
10	3887	4021	5979	9866	50	
20		4074	5926	9863	40	
30		4127	5873	9859	30	
40		4178	5822	9856	20	
50	4083	4230	5770	9853	10	
15 00		9.4281	0.5719	9.9849	00	75
10		4331	5669	9846	50	
20		4381	5619	9843	40	
30		4430	5570	9839	30	
40 50		4479 4527	5521 5473	9836 9832	20 10	
					!	W 4
16 00		9.4575	0.5425	9.9828	00	74
$\frac{10}{20}$		4622 4669	5378 5331	9825 9821	50 40	
30		4716	5284	9817	30	
40		4762	5238	9814	20	
50		4808	5192	9810	10	
17 00	9.4659	9,4853	0.5147	9.9806	00	73
10		4898	5102	9802	50	. 0
20		4943	5057	9798	40	
30		4987	5013	9794	30	
40		5031	4969	9790	20	
50		5075	4925	9786	10	
18 0	9.4900	9.5118	0.4882	9.9782	00	72
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	1	0

0 1	L. Sin.	L. Tan.	L. Cot.	L. Cos.	
18 00	9.4900	9.5118	0.4882	9.9782	00 72
10	4939	5161	4839	9778	50
20	4977	5203	4797	9774	40
30	5015	5245	4755	9770	30
40	5052	5287	4713	9765	20
50	5090	5329	4671	9761	10
19 00	9.5126	9.5370	0.4630	9.9757	00 71
10	5163	5411	4589	9752	50
20	5199	5451	4549	9748	40
30	5235	5491	4509	9743	30
40 50	5270 5306	5531 5571	4469 4429	9739 9734	20 10
20 00	9.5341	9.5611	0.4389	9.9730	00 70 50
10 20	5375	5650 5689	4350 4311	9725 9721	40
30	5409	5727	4273	9716	30
40	5443 5477	5766	4234	9711	20
50	5510	5804	4196	9706	10
		3804	4130	9100	
21 00	9.5543	9.5842	0.4158	9.9702	00 69
10	5576	5879	4121	9697	50
20	5609	5917	4083	9692	40
30	5641	5954	4046	9687	30
40	5673	5991	4009	9682	20
50	5704	+ 6028	3972	9677	10
22 00	9.5736	9.6064	0.3936	9.9672	00 68
10	5767	6100	3900	9667	50
20	5798	6136	3864	9661	40
30	5828	6172	3828	9656	30
40	5859	6208	3792	9651	20
50	5889	6243	3757	9646	10
23 00	9.5919	9.6279	0.3721	9.9640	00 67
10	5948	6314	3686	9635	50
20	5978	6348	3652	9629	40
30	6007	6383	3617	9624	30
40	6036	6417	3583	9618	20
50	6065	6452	3548	9613	10
24 00	9,6093	9.6486	0.3514	9.9607	00 66
10	6121	6520	3480	9602	50
20	6149	6553	3447	9596	4()
30	6177	6587	3413	9590	30
40 50	6205 6232	6620 6654	3380 3346	9584 9579	20 10
25 00	9.6259	9.6687	0.3313	9.9573	00 65
10	6286	6720	3280	9567	50
20	6313	6752	3248	9561	40
30	6340	6785	3215	9555	30
40 50	6366 6392	6817 6850	3183 3150	9549 9543	20 10
26 00	9.6418	9.6882	0.3118	9.9537	00 64
10	6114	6914	3086	9530	50
20	6470	6946	3054	9524	40
30	6495	6977	3023	9518	30 20
40 50	6521 6546	7009 7040	2001 2000	9512 9505	10
27 00	9.6570	9.7072	0.2928	9.9499	00 63
	I Cos	I Cot	1 Ton	I Cir	10
	L. Cos.	L. Cot.	L. Tan.	L. Sin.	, ,

0	′	L. Sin.	L. Tan.	L. Cot.	L. Cos.		
27	00	9,6570	9.7072	0.2928	9.9499	00	63
	10	6595	7103	2897	9492	50	
	20	6620	7134	2866	9486	40 30	
l	30 40	6644 6668	7165 7196	$\frac{2835}{2804}$	9479 9473	20	
1	50	6692	7226	2774	9466	10	
-					9.9459	-00	62
28	00 10	9.6716 6740	9.7257 7287	$0.2743 \\ 2713$	9.3453	50	02
1	20	6763	7317	2683	9446	40	
	30	6787	7348	2652	9439	30	
	40	6810	7378	2622	9432	20	
	50	6833	7408	2592	9425	10	
29	00	9.6856	9.7438	0.2562	9.9418	00	61
1	10	6878	7467	2533	9411	50	
	20	6901	7497	2503	9404	40	
	30	6923	7526	2474	9397	30	
	40	6946	7556	$\frac{2444}{2415}$	9390 9383	20	
	50	6968	7585			10	
30	00	9.6990	9.7614	6.2386	9,9375	-00	60
	10	7012	7644	2356	9368	50	
	20	7033	7673	2327	9361	40	
ł	30	7055 7076	7701 7730	2299 2270	9353 9346	$\frac{30}{20}$	
	40 50	7076	7759	2241	9338	10	
_						-	
31	00	9.7118	9.7788	0.2212	9.9331	00	59
i i	10	7139	7816	2184	9323	50	
	20 30	$7160 \\ 7181$	7845 7873	$2155 \\ 2127$	9315 9308	40	
1	40	7201	7902	2098	9300	20	
	50	7222	7930	2070	9292	10	
32	00	9.7242	9.7958	0.2042	9.9284	-00	58
۱ ° ۳	10	7262	7986	2014	9276	50	••
	20	7282	8014	1986	9268	40	
1	30	7302	8042	1958	9260	- 30	
1	40	7322	8070	1930	9252	20	
	50_	7342	8097	1903	9244	10	
33	00	9.7361	9.8125	0.1875	9.9236	00	57
	10 20	7380 7400	8153 8180	1847	9228 9219	50 40	
	30	7419	8208	1820 1792	9219	30	
1	40	7438	8235	1765	9203	$\frac{30}{20}$	
	50	7457	8263	1737	9194	10	
34	00	9.7476	9.8290	0.1710	9.9186	-00	56
1 -	10	7494	8317	1683	9177	50	
	20	7513	8344	1656	9169	40	
	30	7531	8371	1629	9160	30	
	40	7550	8398	1602	9151	20	
-	50	7568	8425	1575	9142	10	
35	00	9.7586	9.8452	0.1548	9.9134	00	55
	10	7604	8479	1521	9125	50	
	20 30	7622	8506	1494	9116	40	
	30 40	7640 7657	8533 8559	1467 1441	9107 9098	30 20	
	50	7675	8586	1414	9089	10	
36	00	9.7692	9.8613	0.1387	9.9080	00	54
		L. Cos.	L. Cot.	L. Tan.	L. Sin.	'	0

FOUR-PLACE LOGARITHMS (AUGMENTED) OF TRIGONOMETRIC FUNCTIONS.

0	1	L. Sin.	L. Tan.	L. Cot.	L. Cos.		
36	00	9.7692	9.8613	0.1387	9,9080	00	54
	10	7710	8639	1361	9070	50	
	20	7727	8666	1334	9061	40	
	30	7744	8692	1308	9052	30	
	40	7761	8718	1282	9042	20	
	50	7778	8745	1255	9033	10	
37	00	9.7795	9.8771	0.1229	9.9023	-00	53
	10	7811	8797	1203	9014	50	
	20 30	7828	8824	1176	9004	40	
	40	7844	8850	1150	8995	30	
	50	7861 7877	8876 8902	1124 1098	8985 8975	20 10	
38	00	9.7893	9.8928	0.1072	9.8965	00	52
00	10	7910	8954	1046	8955	50	02
	20	7926	8980	1020	8945	40	
	30	7941	9006	0994	8935	30	
	40	7957	9032	0968	8925	20	
	50	7973	9058	0942	8915	10	
39	00	9.7989	9.9084	0.0916	9.8905	-00	51
	10	8004	9110	0890	8895	50	-
	20	8020	9135	0865	8884	40	
	30	8035	9161	0839	8874	30	
	40	8050	9187	0813	8864	20	
	50	8066	9212	0788	8853	10	
40	00	9,8081	9.9238	0.0762	9.8843	00	50
	10	8096	9264	0736	8832	-50	
	20	8111	9289	0711	8821	40	
	30	8125	9315	0685	8810	30	
	40 50	8140 8155	9341 9366	0659 0634	8800 8789	20 10	
41	00	9.8169	9.9392	0.0608	9.8778	00	49
	10	8184	9417	0.0008	8767	50	40
	20	8198	9443	0557	8756	40	
	30	8213	9468	0532	8745	30	
	40	8227	9494	0506	8733	20	
	50	8241	9519	0481	8722	10	
42	00	9.8255	9.9544	0.0456	9.8711	00	48
	10	8269	9570	0430	8699	50	
	20	8283	9595	0405	8688	40	
	30	8297	9621	0379	8676	30	
	40	8311	9646	0354	8665	20	
	50	8324	9671	0329	8653	10	
43	00	9,8338	9,9697	0.0303	9.8641	00	47
	10	8351	9722	0278	8699	50	
	20	8365	9747	0253	8618	40	
	30	8378	9772	0228	8606	30	
	40 50	8391 8405	9798 9823	0202 0177	8594 8582	20 10	
44	00	9.8418					A.
11	10	8431	9,9848	0.0152 0126	9.8569 8557	50	41
	20	8444	9874 9899	0126	8545	40	
	30	8457	9924	0076	8532	30	
	40	8469	9949	0051	8520	20	
	50	8482	9975	0025	8507	10	
45	00	9.8495	10.0000	0,000	9.8495	00	45
		L. Cos.	L. Cot.	L. Tan.	L. Sin.	,	0

0 1	N. Sin	N. Tan.	N. Cot.	N. Cos.		
0 00		.0000	∞	1.0000	00	90
10		.0029	343.77	1.0000	50	
20	.0058	.0058	171.89	1.0000	40	
30 40		.0087	114.59 85.940	1.0000	30 20	
50		.0116	68,750	.9999	10	
50	.0140	.0145	00.100	0000		
1 00		.0175	57.290	.9998	00	89
10 20		.0204	49.104 42.964	.9998 .9997	50 40	
30	.0262	.0262	38.188	.9997	30	
40		.0291	34.368	.9996	20	
50		.0320	31.242	.9995	10	
2 00	.0349	.0349	28.636	.9994	00	88
10		.0378	26.432	.9993	50	-
20		.0407	24.542	.9992	40	
30	.0436	.0437	22.904	.9990	30	
40	.0465	.0466	21.470	.9989	20	
50	.0494	.0495	20.206	.9988	10	
3 00		.0524	19.081	.9986	00	87
10		.0553	18.075	.9985	50	
-20		.0582	17.169	.9983	40	
30		.0612	16.350	.9981	30	
40		.0641	15.605	.9980	20	
50	.0669	.0670	14.924	.9978	10	
4 00	.0698	.0699	14.301	.9976	00	86
10		.0729	13.727	.9974	50	
20		.0758	13.197	.9971	40	
30		.0787	12.706	.9969	30	
40		.0816	12.251	.9967	20	i
50	.0843	.0846	11.826	.9964	10	
5 00	.0872	.0875	11.430	.9962	-00	85
10		.0904	11.059	.9959	50	
20		.0934	10.712	.9957	40	
30		.0963	10.385	.9954	30	
$\frac{40}{50}$.0992	10.078	.9951	20	
- 30	.1016	.1022	9.7882	.9948	10	
6 00		.1051	9.5144	.9945	00	84
$\frac{10}{20}$.1080 .1110	9.2553	.9942 .9939	50 40	
30		.1139	9.0098 8.7769	.9936	30	
40		.1169	8.5555	.9932	20	
50		.1198	8.3450	.9929	10	
7 00	.1219	.1228	8.1443	.9925	-00	83
10		.1257	7.9530	.9922	50	"
20	.1276	.1287	7.7704	.9918	40	
30		.1317	7.5958	.9914	30	
40		.1346	7.4287	.9911	20	
50	.1363	.1376	7.2687	.9907	10	
8 00		.1405	7.1154	.9903	00	82
10		.1435	6.9682	.9899	50	
$\frac{20}{20}$.1465	6.8269	.9894	40	
30		.1495	6.6912	.9890	30	
$\frac{40}{50}$.1524 .1554	6.5606 6.4348	.9886 .9881	20 10	
9 00		.1584	6.3138	.9877	00	81
	N. Cos	N. Cot.	N. Tan.	N. Sin.	,	0
	1 503	550		0		

9 0b	0 1	N. Sin.	N. Tan.	N. Cot.	N. Cos.	
10	9 00	.1564	.1584	6.3138	.9877	00 81
30 .1659 .1673 5.9788 .9853 30 50 .1708 .1733 5.8708 .9858 20 10 .1769 .1733 5.7694 .9853 10 10 .1765 .1793 5.5764 .9848 50 20 .1794 .1823 5.4845 .9838 40 30 .1822 .1853 5.3955 .9833 30 40 .1851 .1883 5.3095 .9833 30 50 .1880 .1914 5.2257 .9822 10 11 00 .1908 .1944 5.1446 .9816 00 79 20 .1965 .2004 4.9894 .9805 40 .2022 .2065 4.8430 .9733 20 40 .2022 .2065 4.8430 .9733 20 20 10 .2108 .2156 4.6382 .9775 50 20 .2136<	10	.1593	.1614	6.1970		50
30 .1659 .1673 5.9758 .9853 30 50 .1679 .1703 5.8708 .9853 20 10 .1765 .1733 5.7694 .9853 10 10 .1765 .1793 5.5764 .9848 50 80 20 .1794 .1823 5.4845 .9838 40 30 .1822 .1853 5.3955 .9833 30 40 .1831 .1883 5.3013 .9827 20 10 .1908 .1944 5.1446 .9816 00 79 10 .1908 .1944 5.1446 .9816 00 79 10 .1905 .2004 4.9894 .9805 40 20 .1965 .2004 4.9894 .9805 40 20222 .2055 4.8430 .9733 20 20 .2079 .2126 4.7046 .9781 0 78	20	.1622	.1644	6.0844	.9868	40
50 .1708 .1733 5.7694 .9853 10 10 .1765 .1763 5.6713 .9848 00 80 10 .1765 .1793 5.5764 .9843 50 1822 .1853 5.3955 .9833 30 40 .1851 .1883 5.3935 .9827 20 .1880 .1944 5.2257 .9822 10 .9816 00 79 .180 .1944 5.1446 .9816 00 79 .1965 .2004 4.9894 .9805 40 .1965 .2004 4.9894 .9805 40 .9022 .2065 4.8430 .9799 30 .9799 30 .9799 30 .9799 30 .9781 00 78 .9799 .9787 10 .2168 4.7046 .9781 00 78 .9799 30 .9781 00 78 .9755 50 .22164 .2217 4.7046 .9781 00 78 .9775		.1650		5.9758		30
50 .1708 .1733 5.7694 .9853 10 10 .1765 .1763 5.6713 .9848 00 80 10 .1765 .17193 5.5764 .9843 50 1822 .1853 5.3955 .9833 30 40 .1851 .1883 5.3033 .9827 20 .1860 .1914 5.2257 .9822 10 .9816 00 79 .1965 .2004 .4,9894 .9805 40 .1937 .1974 5.0658 .9811 50 30 .1996 .2004 4,9894 .9805 40 .2022 .2005 4,8430 .9793 30 .9811 50 20 .1965 .2004 4,9894 .9805 40 .2022 .2005 4,7429 .9787 10 .20 .2051 .2055 4,7429 .9787 10 .2166 4,7046 .9781 00 78 .20 .2136 .2186 4,5736 .9769 40 .472	40	.1679	.1703	5.8708	.9858	20
10 1765 1.1793 5.5764 .9843 50 20 1.1794 1.823 5.4845 .9838 40 30 1.1851 1.1883 5.3093 .9827 20 50 1.1880 1.1914 5.2257 .9822 10 11 00 1.1908 1.1944 5.1446 .9816 00 79 10 1.1937 1.1974 5.0658 .9811 50 20 1.965 .2004 4.9894 .9805 40 2002 2.9055 4.8430 .9793 20 30 1.1994 .2035 4.9152 .9793 20 20 2.2168 4.6382 .9775 10 12 20 .2079 .2126 4.7046 .9781 00 78 10 .2108 .2156 4.6382 .9775 10 78 20 .2164 .2217 4.5107 .9763 30 29 2936 2374 4.4344 <th></th> <td></td> <td></td> <td></td> <td></td> <td></td>						
20 .1794 .1823 5.4845 .9838 40 30 .1822 .1853 5.3955 .9833 30 40 .1851 .1883 5.3955 .9832 20 50 .1880 .1914 5.2257 .9822 10 11 00 .1908 .1944 5.1446 .9816 00 79 10 .1937 .1974 5.0658 .9811 50 20 1965 20 1965 40 1902 20 1965 40 1963 40 2022 2065 4.8192 .9789 30 40 2022 2065 4.8430 .9781 00 78 10 .2278 .2156 4.6382 .9775 10 12 00 .2278 .2186 4.5736 .9789 40 20 .2136 .2186 4.5736 .9789 40 30 .2164 .2217 4.44494 .9757	10 00	.1736	.1763	5.6713	.9848	00 80
30 1.822 1.853 5.3955 .9833 30 40 1.851 1.883 5.3093 .9827 20 10 1.908 1.944 5.1446 .9816 00 79 10 1.937 1.974 5.0658 .9811 50 10 79 20 1.965 .2004 4.9894 .9805 40 2022 2055 4.8430 .9793 20 40 .2022 .2055 4.8430 .9793 20 20 2055 4.8430 .9793 20 10 .2108 .2156 4.6382 .9775 10 79 10 .2108 .2156 4.6382 .9775 50 78 20 .2136 .2186 4.5736 .9769 40 2193 .2247 4.45107 .9763 30 2164 .2217 4.5107 .9763 30 22164 .2217 4.45107 .9763 30 2234	10	.1765	.1793	5.5764	.9843	50
30 1822 1.1853 5.3955 .9833 30 40 .1851 1.1883 5.3093 .9827 20 10 .1908 .1944 5.1446 .9816 00 79 10 .1937 .1974 5.0658 .9811 50 150 20 1965 .2004 4.9894 .9805 40 2022 .2055 4.8430 .9799 30 40 2022 .2055 4.8430 .9799 30 20 20 20 20 20 20 20 20 20 20 20 20 20 2186 4.6382 .9775 50 20 2136 4.6382 .9775 50 20 2136 4.5364 .9781 00 78 20 2193 2247 4.4510 .9763 30 2144 .2217 4.5107 .9763 30 2444 .2217 4.5107 .9763 30 234 .2447 .44494 .9757<	20	.1794	.1823	5.4845	.9838	40
50 .1880 .1914 5.2257 .9822 10 11 00 .1908 .1944 5.1446 .9816 00 79 10 .1937 .1974 5.0658 .9811 50 20 .1965 .2004 4.9884 .9805 40 30 .1994 .2035 4.9152 .9769 30 40 .2022 .2065 4.8430 .9793 20 50 .2031 .2905 4.7046 .9781 00 78 10 .2108 .2156 4.6382 .9775 50 20 .2136 .2186 4.5736 .9769 40 40 .2193 .2247 4.44494 .9757 20 20 .2306 .2278 4.3897 .9750 10 13 00 .2250 .2309 4.3315 .9744 00 77 77 20 .2306 .2339 4.2747 .9737 50 70 20	30			5.3955	.9833	30
12 00 .1908 .1944 5.1446 .9816 00 79 20 .1965 .2004 4.9894 .9805 40 30 .1994 .2035 4.9152 .9799 30 40 .2022 .2005 4.8430 .9793 20 50 .2051 .2095 4.7729 .9787 10 12 00 .2079 .2126 4.7046 .9781 00 78 10 .2108 .2156 4.5382 .9775 50 20 .2136 2186 4.5736 .9769 40 .2193 .2247 4.5107 .9763 30 2164 .2217 4.5107 .9763 30 2164 .2217 4.4494 .9757 20 20 .2306 .2370 4.3315 .9744 00 77 20 .2306 .2370 4.2193 .9737 40 .2333 .2344 4.2143 .9724 30 4.2193 .9737 40 <	40	.1851	.1883	5.3093	.9827	20
10 1937 .1974 5.0658 .9811 50 20 .1965 .2004 4.9894 .9805 40 30 .1994 .2035 4.9152 .9799 30 40 .2022 .2065 4.8430 .9793 20 50 .2051 .2095 4.7729 .9787 10 12 00 .2079 .2126 4.7046 .9781 00 78 10 .2136 .2186 4.5736 .9769 40 2193 .2164 .2217 4.5107 .9763 30 2164 .2217 4.5107 .9763 30 2164 .2217 4.5107 .9763 30 2164 .2217 4.5107 .9763 30 10 .2193 .2247 4.44494 .9757 20 10 .2278 .2339 4.2747 .9737 50 77 10 .2278 .2339 4.2747 .9737 50 29 .2363 .2432	50	.1880	.1914	5.2257	.9822	10
20 .1965 .2004 4.9894 .9805 40 30 .1994 .2035 4.9152 .9799 30 40 .20222 .2065 4.8430 .9793 20 50 .2051 .2095 4.7729 .9787 10 12 .00 .2079 .2126 4.7046 .9781 00 78 10 .2108 .2156 4.5736 .9769 40 .9783 30 .2164 .2217 4.5107 .9763 30 .2164 .2217 4.5107 .9763 30 .2164 .2217 4.5107 .9763 30 .2464 .2193 .2247 4.4494 .9757 20 .200 .200 .2309 4.3315 .9744 00 77 10 .2250 .2209 4.3315 .9744 00 77 20 .2306 .2370 4.2193 .9730 40 2363 .2442 4.0611 .9710 10 .2447		.1908	.1944	5.1446	.9816	00 79
30 .1994 .2035 4.9152 .9799 30 40 .2022 .2055 4.8430 .9793 20 50 .2051 .2095 4.7729 .9787 10 12 00 .2079 .2126 4.7046 .9781 00 78 10 .2108 .2156 4.6382 .9775 50 20 .2136 .2186 4.5736 .9769 40 30 .2164 .2217 4.5107 .9763 30 .9757 20 40 .2193 .2247 4.4494 .9757 20 .250 .2221 .2278 4.3897 .9750 10 13 00 .2250 .2309 4.3315 .9744 00 77 10 .2278 .2339 4.2747 .9737 50 20 .2306 .2370 4.2193 .9730 40 77 20 .2363 .2432 4.1126 .9717 <t< td=""><th>10</th><td>.1937</td><td>.1974</td><td>5.0658</td><td>.9811</td><td>50</td></t<>	10	.1937	.1974	5.0658	.9811	50
40 .2022 .2055 4.8430 .9793 20 50 .2051 .2095 4.7729 .9787 10 12 00 .2079 .2156 4.7046 .9781 00 78 10 .2108 .2156 4.6382 .9775 50 20 .2136 .2186 4.5736 .9769 40 30 .2164 .2217 4.5107 .9763 30 40 .2133 .2247 4.4494 .9757 20 10 .2250 .2309 4.3315 .9744 00 77 10 .2278 .2339 4.2747 .9737 50 20 .2306 .2370 4.2193 .9730 40 30 .2334 .2401 4.1653 .9724 30 40 .2363 .2432 4.1126 .9717 20 2391 .2462 4.0611 .9710 10 14	20	.1965	.2004	4.9894	.9805	40
50 .2051 .2095 4.7729 .9787 10 12 00 .2079 .2126 4.7046 .9781 00 78 10 .2108 .2156 4.6382 .9775 50 20 .2136 .2186 4.5107 .9763 30 30 .2164 .2217 4.5107 .9763 30 40 .2193 .2247 4.4494 .9757 20 50 .22278 .2389 4.2747 .9737 50 10 .2278 .2339 4.2747 .9737 50 20 .2306 .2370 4.2193 .9730 40 .2331 .2401 4.1653 .9724 30 40 .2343 .2401 4.1653 .9737 50 .2391 .2462 4.0611 .9717 20 .2391 .2462 4.0611 .9710 10 14 00 .2419 .24	30	.1994	.2035	4.9152	.9799	30
50 .2051 .2095 4.7729 .9787 10 12 00 .2079 .2126 4.7046 .9781 00 78 10 .2108 .2156 4.6382 .9775 50 20 .2136 .2186 4.5736 .9769 40 .9769 40 .2193 .2247 4.4494 .9757 20 .9769 40 .2193 .2247 4.4494 .9757 20 .9750 10 .2250 .2259 4.2315 .9744 .9757 20 .9760 10 .2278 .2339 4.2747 .9737 50 .9737 20 .2306 .2370 4.2193 .9730 40 .2333 .2432 4.1126 .9717 20 .2391 .2462 4.0611 .9710 10 .9447 .2524 .9511 .9710 10 .9447 .2524 .9511 .969 50 .76 14 00 .2419 .2493 4.0108 .9703				4.8430	.9793	
10 .2108 .2156 4.6382 .9775 50 20 .2136 .2186 4.5736 .9769 40 30 .2164 .2217 4.5107 .9763 30 40 .2193 .2247 4.4494 .9757 20 50 .2221 .2278 4.3897 .9750 10 13 00 .2250 .2309 4.3315 .9744 .00 77 10 .2278 .2389 4.2747 .9737 50 20 .2306 .2370 4.2193 .9730 40 2363 .2432 4.1126 .9717 20 .2391 .2462 4.0611 .9710 10 .2419 .2462 4.0611 .9710 10 .2419 .2462 4.0611 .9710 10 .2419 .2462 4.0611 .9710 10 .2417 .2524 .30617 .9996 40 .2536 .30617 .9996 40 .2536 .36367	50	.2051		4.7729	.9787	10
20 .2136 .2186 4.5736 .9769 40 30 .2164 .2217 4.5107 .9763 30 40 .2193 .2247 4.4494 .9757 20 50 .2221 .2278 4.3897 .9750 10 13 .00 .2250 .2309 4.3315 .9744 .00 77 10 .2278 .2339 4.2747 .9737 50 40 .30 .2334 .2401 4.1653 .9724 30 40 .2363 .2432 4.1126 .9717 20 .2363 .2432 4.1061 .9710 10 .9724 30 40 .2331 .2462 4.0611 .9710 10 .9724 30 .2401 .2462 4.0611 .9710 10 .9724 30 .2504 .2564 3.9617 .9696 50 .9696 50 .2476 .2555 3.9136 .9696 50 .9696 50 .			.2126	4.7046	.9781	
30 2164 40 22193 2218 2247 2247 4.5107 4.4494 .9757 .9757 20 13 00 22250 2.309 20 4.3897 .9750 10 10 .2278 2.339 20 4.2747 20 .9737 20 50 4.2793 20 .9730 20 40 30 .2334 2401 4.1653 4.0611 .9730 9717 40 40 40 .2363 2391 .2462 2462 4.0611 .9710 10 14 00 .2419 20 .2493 2555 30 4.0108 2555 3.9136 .9703 9099 00 76 30 .2504 2566 .2555 3.9136 .9089 9074 50 2588 250 .9681 20 30 .2504 2568 .38067 3.8208 .9674 20 20 .2648 3.7760 .9681 30 30 .2500 2568 .2679 2648 3.7321 3.6059 .9659 9674 00 75 10 .2588 .2679 20 3.6480 2672 .9659 2728 .2867 2773 3.6059 3.6526 .9636 30 30 .2672 2673 .2763 3.6470 .9644 40 <td< td=""><th></th><td></td><td></td><td></td><td></td><td></td></td<>						
40 .2193 .2247 4.4494 .9757 20 50 .2221 .2278 4.3887 .9750 10 13 00 .2250 .2309 4.3315 .9744 .00 77 10 .2278 .2389 4.2193 .9737 50 .9730 40 .2363 .2334 .2401 4.1653 .9724 30 40 .2363 .2432 4.1126 .9717 20 .9703 00 76 .9717 20 .2419 .2493 4.0108 .9703 00 76 .9717 20 .2419 .2493 4.0108 .9703 00 76 .9717 20 .2419 .2493 4.0108 .9703 00 76 .90 .90 .90 70 .90 70 .90 .90 .90 76 .90 .90 .90 .90 76 .90 .90 .90 .90 .90 .90 .90 .90 .90				4.5736		
50 .2221 .2278 4.3897 .9750 10 13 00 .2250 .2309 4.3315 .9744 .00 77 10 .2278 .2339 4.2747 .9737 50 20 .2366 .2370 4.2193 .9730 40 20 .2331 .2432 4.1126 .9717 20 50 .2391 .2462 4.0611 .9710 10 14 00 .2447 .2524 4.0108 .9703 00 76 10 .2447 .2524 3.9617 .9696 50 20 .2476 .2555 3.9136 .9689 40 20 .2547 .2586 3.8637 .9881 30 40 .2532 .2618 3.7760 .9667 10 15 00 .2588 .2679 3.7321 .9659 00 75 10 .2616 .2711 3.6891				4.5107	.9763	
13 00 .2250 .2309 4.3315 .9744 00 77 10 .2278 .2389 4.2747 .9737 50 20 .2306 .2370 4.2193 .9730 40 30 .2334 .2401 4.1653 .9724 30 40 .2363 .2432 4.1126 .9717 20 .2391 .2462 4.0611 .9710 10 .9703 00 76 .90 .2447 .2524 3.9617 .9696 50 .90 .2476 .2555 3.9136 .9689 50 .9689 40 .2532 .2617 3.8208 .9674 20 .2560 .2586 3.8697 .9681 30 .2504 .2586 3.8697 .9681 30 .2504 .2586 3.8697 .9681 30 .2679 .37821 .9659 0 75 10 .2588 .2679 3.7321 .9659 0 75 .9674 40 .2700 .2805						
10 2278 2339 4.2747 .9737 50 20 2366 2370 4.2193 .9730 40 30 2334 2401 4.1653 .9724 30 40 2363 2432 4.1126 .9717 20 50 2391 2462 4.0611 .9710 10 14 00 .2419 .2493 4.0108 .9703 00 76 10 .2447 .2524 3.9617 .9696 50 26 2476 .2555 3.9136 .9689 40 23 30 .2504 .2586 3.8667 .9681 30 .2504 2586 3.8667 .9681 30 .2504 2586 3.8697 .9681 30 .2504 20 .2648 3.7760 .96674 20 .2614 .2711 3.6891 .9659 00 75 10 .2588 .2679 3.7321 .9659 00 75	50	.2221	.2278	4.3897	.9750	10
20 2306 2370 4.2193 .9730 40 30 2334 2401 4.1653 .9724 30 40 2363 2432 4.1126 .9717 20 50 2391 .2462 4.0611 .9710 10 14 00 .2419 .2493 4.0108 .9703 00 76 20 .2476 .2555 3.9136 .9689 40 20 .2476 .2555 3.9136 .9689 40 2532 .2617 3.8208 .9674 20 30 .2532 .2617 3.8208 .9674 20 50 .2588 .2679 3.7321 .9659 0 75 10 .2616 .2711 3.6891 .9652 50 20 2644 .2742 3.6470 .9644 40 20 20 .2867 3.6059 .9636 30 2672 .2773 3.6059 .9636 <th></th> <td></td> <td></td> <td></td> <td></td> <td></td>						
30 2334 2401 4.1653 .9724 30 40 2363 2432 4.0126 .9717 20 50 2391 2462 4.0611 .9710 10 14 00 2419 2462 4.0618 .9703 00 76 10 .2447 .2524 3.9617 .9696 50 20 .2476 .2555 3.9136 .9689 40 30 .2544 .2586 3.8667 .9681 30 40 .2532 .2617 3.8208 .9674 20 50 .2560 .2648 3.7760 .9667 10 15 00 .2588 .2679 3.7321 .9659 00 75 10 .2616 .2711 3.6891 .9652 50 20 .2644 .2742 3.6470 .9644 40 270 .2807 3.5656 .9628 20 <						
50 .2391 .2462 4.0611 .9710 10 14 00 .2419 .2493 4.0108 .9703 00 76 20 .24476 .2525 3.9617 .9696 50 30 .2504 .2586 3.8637 .9681 30 40 .2532 .2617 3.8208 .9674 20 2560 .2568 3.7760 .9667 10 15 00 .2588 .2679 3.7321 .9659 00 75 10 .2616 .2711 3.6891 .9652 50 10 .2616 .2711 3.6891 .9652 50 20 .2644 .2742 3.6470 .9644 40 20 .2672 .2773 3.6059 .9636 30 2672 .2728 .2836 3.5261 .9621 10 16 00 .2756 .2867 3.4874 .9613 00 74 20 .					.9730	
50 .2391 .2462 4.0611 .9710 10 14 00 .2419 .2493 4.0108 .9703 00 76 20 .24476 .2525 3.9617 .9696 50 30 .2504 .2586 3.8637 .9681 30 40 .2532 .2617 3.8208 .9674 20 2560 .2568 3.7760 .9667 10 15 00 .2588 .2679 3.7321 .9659 00 75 10 .2616 .2711 3.6891 .9652 50 10 .2616 .2711 3.6891 .9652 50 20 .2644 .2742 3.6470 .9644 40 20 .2672 .2773 3.6059 .9636 30 2672 .2728 .2836 3.5261 .9621 10 16 00 .2756 .2867 3.4874 .9613 00 74 20 .					.9724	
14 00 .2419 .2493 4.0108 .9703 00 76 10 .2447 .2524 3.9617 .9696 50 20 .2476 .2555 3.9136 .9689 40 30 .2504 .2586 3.8697 .9681 30 40 .2532 .2617 3.8208 .9674 20 50 .2560 .2648 3.7760 .9667 10 15 00 .2588 .2679 3.7321 .9659 00 75 10 .2616 .2711 3.6891 .9652 50 10 .9644 40 .9652 50 250 256 3.6891 .9659 00 75 36059 .9636 30 30 .2672 .2773 3.6059 .9636 30 30 .2688 20 .2688 20 .2688 20 .2688 20 .2688 20 .2688 20 .2688 20 .2688 20						
10 2447 .2524 3.9617 .9686 50 20 .2476 .2555 3.9136 .9689 40 30 .2504 .2586 3.8697 .9681 30 40 .2532 .2617 3.8208 .9674 20 50 .2560 .2648 3.7760 .9667 10 15 00 .2588 .2679 3.7321 .9659 00 75 10 .2616 .2711 3.6891 .9652 50 20 .2644 .2742 3.6470 .9644 40 30 .2672 .2773 3.6059 .9636 30 40 .2700 .2805 3.5656 .9628 20 .2828 20 .2564 .2867 3.4874 .9613 00 74 10 .2784 .2899 3.4495 .9605 50 .2840 2962 3.3759 .9588 30 30 .2840 .2962 3.3759	50	.2391	.2462	4.0611	.9710	10
20 .2476 .2555 3.9136 .9689 40 30 .2504 .2586 3.8637 .9681 30 40 .2532 .2617 3.8208 .9674 20 50 .2560 .2648 3.7760 .9667 10 15 .00 .2588 .2679 3.7321 .9659 .00 75 10 .2616 .2711 3.6891 .9652 50 .9544 40 .9672 .2773 3.6059 .9636 30 .9672 .2773 3.6059 .9636 30 .9628 20 .9684 40 .2700 .2805 3.5656 .9628 20 .9621 10 .9621 10 .9621 10 .9621 10 .2784 .2893 3.5261 .9621 10 .74 .2784 .2893 3.4495 .9605 50 .2868 .2994 .33402 .9588 30 .440 .2868 .2994 3.3402						
30 2504 2586 3.8667 .9681 30 40 2532 .2617 3.8208 .9674 20 50 .2560 .2648 3.7760 .9674 20 15 00 .2588 .2679 3.7321 .9659 00 75 10 .2616 .2711 3.6891 .9652 50 20 .2644 .2742 3.6470 .9644 40 30 .2672 .2773 3.6059 .9636 30 40 .2700 .2805 3.5656 .9628 20 50 .2728 .2836 3.5261 .9621 10 10 .2784 .2899 3.4495 .9603 50 74 20 .2812 .2931 3.4124 .9596 40 2962 3.3759 .9588 30 40 .2868 .2994 3.3402 .9580 20 20 2812 .3057 3.2709<						
40 .2532 .2617 3.8208 .9674 20 50 .2560 .2648 3.7760 .9667 10 15 00 .2581 .2679 3.7321 .9659 00 75 10 .2616 .2711 3.6891 .9652 50 20 .2644 .2742 3.6470 .9644 40 .2700 .2805 3.6059 .9636 30 .2672 .2773 3.6059 .9636 30 .2621 10 .2784 .2895 3.5656 .9628 20 .2852 .2836 3.5261 .9621 10 .2784 .2899 3.4495 .9605 50 74 .2842 .2836 .34495 .9605 50 .2840 .2962 3.3759 .9588 30 .2840 .2962 3.3759 .9580 20 .2856 .2944 3.3402 .9580 20 .2856 .2964 3.052 .9572 10 17 00 .2924						
50 .2560 .2648 3.7760 .9667 10 15 00 .2588 .2679 3.7321 .9659 00 75 10 .2616 .2711 3.6891 .9652 50 20 .2644 .2742 3.6470 .9944 40 30 .2672 .2773 3.6059 .9636 30 40 .2700 .2805 3.5656 .9628 20 50 .2728 .2836 3.5261 .9621 10 16 00 .2756 .2867 3.4874 .9613 00 74 10 .2784 .2899 3.4495 .9005 50 20 .2812 .2931 3.4424 .9596 40 2868 .2994 3.3402 .9580 20 40 .2868 .2994 3.3402 .9580 20 10 .2952 .3089 3.2371 .9535 50						
15 00 .2588 .2679 3.7321 .9659 00 75 10 .2616 .2711 3.6891 .9652 50 20 .2644 .2742 3.6470 .9644 40 30 .2672 .2773 3.6059 .9636 30 40 .2700 .2805 3.5636 .9628 20 50 .2728 .2836 3.5261 .9621 10 16 00 .2756 .2867 3.4874 .9613 00 74 20 .2812 .2931 3.4495 .9605 50 20 .2812 .2931 3.4124 .9566 40 30 .2868 .2964 3.3402 .9580 20 50 .2896 .3026 3.252 .9572 10 17 00 .2952 .3089 3.2371 .9555 50 20 .2979 .3121 3.2041 .9546					.9674	
10 .2616 .2711 3.6891 .9652 50 20 .2644 .2742 3.6470 .9944 40 30 .2672 .2773 3.6059 .9636 30 40 .2700 .2805 3.5656 .9628 20 50 .2728 .2836 3.5261 .9621 10 16 00 .2756 .2867 3.4874 .9613 00 74 10 .2784 .2899 3.4495 .9056 50 20 .2812 .2931 3.4424 .9596 50 30 .2840 .2962 3.3759 .9588 30 40 .2868 .2994 3.3402 .9580 20 50 .2896 .3026 3.3052 .9572 10 17 00 .2924 .3057 3.2709 .9563 0 73 20 .2979 .3121 3.2041 .9546 40	50	.2560	.2648	3,7760	.9667	10
20 .2644 .2742 3.6470 .9644 40 30 .2672 .2773 3.6059 .9636 30 40 .2700 .2805 3.5656 .9628 20 50 .2728 .2836 3.5261 .9621 10 16 .00 .2756 .2867 3.4874 .9613 00 74 10 .2784 .2899 3.4495 .9605 50 20 .2812 .2931 3.4124 .9596 40 30 .2840 .2962 3.3759 .9588 30 40 .2868 .2994 3.3402 .9580 20 50 .2896 .3026 3.252 .9572 10 17 .00 .2924 .3057 3.2371 .9533 0 73 20 .2979 .3121 3.2041 .9546 40 30 .3007 .3153 3.1716 .9537 30 <th></th> <td></td> <td></td> <td></td> <td></td> <td></td>						
30 .2672 .2773 3.6059 .9636 30 40 .2700 .2805 3.5656 .9628 20 50 .2728 .2836 3.5261 .9621 10 16 00 .2756 .2867 3.4874 .9613 00 74 20 .2812 .2931 3.4495 .9605 50 20 20 .2840 .2962 3.3759 .9588 30 40 .2868 .2994 3.3402 .9550 20 50 .2896 .3026 3.3052 .9572 10 17 00 .2924 .3057 3.2709 .9563 00 73 10 .2952 .3989 3.2371 .9555 50 20 .2979 .3121 3.2041 .9546 40 30 .3007 .3153 3.1716 .9537 30 30 .3062 .3217 3.1084 .9520 10 <th></th> <td></td> <td></td> <td></td> <td></td> <td></td>						
40 .2700 .2805 3.5656 .9628 20 50 .2728 .2836 3.5261 .9621 10 16 .00 .2756 .2867 3.4874 .9613 00 74 10 .2784 .2899 3.4495 .9005 50 20 .2812 .2931 3.4494 .9596 50 30 .2840 .2962 3.3759 .9588 30 40 .2868 .2994 3.3402 .9580 20 50 .2896 .3026 3.2709 .9563 20 10 .2952 .3089 3.2371 .9535 50 20 .2979 .3121 3.2041 .9546 40 30 .3907 .3153 3.1716 .9537 30 40 .3035 .3185 3.1397 .9528 20 50 .3062 .3217 3.1084 .9520 10 18 <th></th> <td></td> <td></td> <td></td> <td></td> <td></td>						
50 .2728 .2836 3.5261 .9621 10 16 00 .2756 .2867 3.4874 .9613 00 74 10 .2784 .2899 3.4495 .9605 50 20 .2812 .2931 3.4124 .9596 40 20 .2840 .2962 .3.3759 .9588 30 40 .2868 .2994 3.3402 .9580 20 50 .2896 .3026 3.252 .9572 10 17 00 .2924 .3057 3.2709 .9563 00 73 20 .2979 .3121 3.2041 .9537 30 30 .3907 .3153 3.1716 .9537 30 40 .3035 .3185 3.1397 .9528 20 50 .3062 .3217 3.1084 .9520 10 18 00 .3090 .3249 3.0777 .9511 <th></th> <td></td> <td>.2773</td> <td></td> <td></td> <td></td>			.2773			
16 00 .2756 .2867 3.4874 .9613 00 74 10 .2784 .2899 3.4495 .9605 50 20 .2812 .2931 3.4124 .9596 40 30 .2840 .2962 3.3759 .9588 30 40 .2868 .2994 3.3402 .9580 20 50 .2896 .3026 3.3052 .9572 10 17 00 .2924 .3057 3.2709 .9563 00 73 10 .2952 .3989 3.2371 .9555 50 20 .2979 .3121 3.2041 .9546 40 30 .3007 .3153 3.1716 .9537 30 40 .3035 .3185 3.1397 .9528 20 50 .3062 .3217 3.1084 .9520 10 18 00 .3090 .3249 3.0777 .9511 <th></th> <td></td> <td></td> <td></td> <td></td> <td></td>						
10 .2784 .2899 3.4495 .9005 50 20 .2812 .2931 3.4124 .9396 40 30 .2840 .2962 3.3759 .9580 30 40 .2868 .2994 3.3402 .9580 20 50 .2896 .3026 3.3052 .9572 10 17 .00 .2924 .3057 3.2709 .9563 .00 73 10 .2952 .3089 3.2371 .9555 50 20 .2979 .3121 3.2041 .9536 40 30 .3007 .3153 3.1716 .9537 30 40 .3035 .3185 3.1397 .9528 20 50 .3062 .3217 3.1084 -9520 10 18 .00 .3090 .3249 3.0777 .9511 .00 72	50	.2728	.2836	3.5261	.9621	10
20 .2812 .2931 3.4124 .9596 40 30 .2840 .2962 3.3759 .9588 30 40 .2868 .2994 3.3402 .9580 20 50 .2896 .3026 3.3052 .9572 10 17 00 .2924 .3057 3.2709 .9563 00 73 10 .2952 .3989 3.2371 .9555 50 20 .2979 .3121 3.2041 .9546 40 30 .3007 .3153 3.1716 .9537 30 40 .3035 .3185 3.1397 .9528 20 50 .3062 .3217 3.1084 .9520 10 18 00 .3090 .3249 3.0777 .9511 00 72						
30 .2840 .2962 3.3759 .9588 30 40 .2868 .2994 3.3402 .9580 20 50 .2896 .3026 3.3052 .9572 10 17 00 .2924 .3057 3.2709 .9563 00 73 10 .2952 .3989 3.2371 .9555 50 20 .2979 .3121 3.2041 .9546 40 30 .3907 .3185 3.1397 .9528 20 50 .3062 .3217 3.1084 -9520 10 18 00 .3090 .3249 3.0777 .9511 00 72						
40 .2868 .2994 3.3402 .9580 20 50 .2896 .3026 3.3052 .9572 10 17 00 .2924 .3057 3.2709 .9563 00 73 10 .2952 .3089 3.2371 .9555 50 20 .2979 .3121 3.2041 .9537 30 30 .3907 .3153 3.1716 .9537 30 40 .3035 .3185 3.1397 .9528 20 50 .3062 .3217 3.1084 -9520 10 18 00 .3090 .3249 3.0777 .9511 00 72						
50 .2896 .3026 3.3052 .9572 10 17 00 .2924 .3057 3.2709 .9563 00 73 10 .2952 .3089 3.2371 .9555 50 20 .2979 .3121 3.2041 .9546 40 30 .3007 .3153 3.1716 .9537 30 40 .3035 .3185 3.1397 .9528 20 50 .3062 .3217 3.1084 .9520 10 18 00 .3090 .3249 3.0777 .9511 00 72						
17 00 .29:24 .3057 3.2709 .9563 00 73 10 .2952 .3089 3.2371 .9555 50 20 .2979 .3121 3.2041 .9546 40 30 .3007 .3153 3.1716 .9537 30 40 .3035 .3185 3.1397 .9528 20 50 .3062 .3217 3.1084 -9520 10 18 00 .3090 .3249 3.0777 .9511 00 72						
10 .2952 .3089 3,2371 .9555 50 20 .2979 .3121 3,2041 .9546 40 30 .3007 .3153 3,1716 .9537 30 40 .3035 .3185 3,1397 .9528 20 50 .3062 .3217 3,1084 .9520 10 18 00 .3090 .3249 3,0777 .9511 00 72	50	.2896	.3026	3,3052	.9572	10
20 .2979 .3121 3.2041 .9546 40 30 .3907 .3153 3.1716 .9537 30 40 .3035 .3185 3.1397 .9528 20 50 .3062 .3217 3.1084 -9520 10 18 .00 .3090 .3249 3.0777 .9511 .00 72						
30 .3007 .3153 3.1716 .9537 30 40 .3035 .3185 3.1397 .9528 20 50 .3062 .3217 3.1084 .9520 10 18 00 .3000 .3249 3.0777 .9511 00 72						
40 .3035 .3185 3,1397 .9528 20 50 .3062 .3217 3,1084 .9520 10 18 .00 .3000 .3249 3,0777 .9511 .90 72	20			3.2041		
50 .3062 .3217 3.1084 .9520 10 18 .00 .3090 .3249 3.0777 .9511 00 72						
18 00 .3090 .3249 3.0777 .9511 00 72						
N. Con N. Con N. Ton N. Cim J. C.						

0 1		N. Sin.	N. Tan.	N. Cot.	N. Cos.	
18 00)	.3090	.3249	3.0777	.9511	00 72
10		.3118	.3281	3.0475	.9502	50
20		.3145	.3314	3.0178	.9492	40
30		.3173	.3346	2.9887	.9483	30
40		.3201	.3378	2.9600	.9474	20
50)	.3228	.3411	2.9319	.9465	10
19 00)	3256	.3443	2.9042	.9455	00 71
10		.3283	.3476	2.8770	.9446	50
20		.3311	.3508	2.8502	.9436	40
30		.3338	.3541	2.8239	.9426	30
40		.3365	.3574	2.7980	.9417	20
50)	.3393	.3607	2.7725	.9407	10
20 00		.3420	.3640	2.7475	.9397	00 70
10		.3448	.3673	2.7228	.9387	50
20		.3475	.3706	2.6985	.9377	40
30		.3502	.3739	2.6746	.9367	30
40		.3529	.3772	2.6511	.9356	20
50)	.3557	.3805	2.6279	.9346	10
21 00		.3584	.3839	2.6051	.9336	00 69
10		.3611	.3872	2.5826	.9325	50
20		.3638	.3906	2.5605	.9315	40
30		.3665	.3939	2.5386	.9304	30
40		.3692	.3973	2.5172	.9293	20
• 50	_	.3719	.4006	2.4960	.9283	10
22 00)	.3746	.4040	2.4751	9272	00 68
10)	.3773	.4074	2.4545	.9261	50
20		.3800	.4108	2,4342	.9250	40
30)	.3827	.4142	2.4142	.9239	30
40		.3854	.4176	2.3945	.9228	20
50)	.3881	.4210	2.3750	.9216	10
23 00)	.3907	.4245	2.3559	.9205	00 67
10)	.3934	.4279	2.3369	.9194	50
20		.3961	.4314	2.3183	.9182	40
30		.3987	.4348	2.2998	.9171	30
40		.4014	.4383	2.2817	.9159	20
50)	.4041	.4417	2.2637	.9147	10
24 00		.4067	.4452	2.2460	.9135	00 66
10		.4094	.4487	2.2286	.9124	50
20		.4120	.4522	2.2113	.9112	40
30		.4147	.4557	2.1943	.9100	30
40		.4173	.4592	2.1775	.9088	20
50)	.4200	.4628	2.1609	.9075	10
25 00		.4226	.4663	2.1445	.9063	00 65
10		.4253	.4699	2.1283	.9051	50
20		.4279	.4734	2.1123	.9038	40
30		.4305	.4770	2.0965	.9026	30
40		.4331	.4806	2.0809	.9013	20
50	_	.4358	.4841	2.0655	.9001	10
26 00		.4384	.4877	2.0503	.8988	00 64
10		.4410	.4913	2.0353	.8975	50
20		.4436	.4950	2.0204	.8962	40
30		.4462	.4986	2.0057	.8949	30
40		.4488	.5023	1.9912	.8936	20
50	,	.4514	.5059	1.9768	.8923	10
27 00)	.4540	.5095	1.9626	.8910	00 63
		N. Cos.	N. Cot.	N. Tan.	N. Sin.	′ 0

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		N. Cos.	N. Cot.	N. Tan.	N. Sin.	,	0
10 .45962 .5169 1.9347 .8884 40 30 .4617 .5206 1.9210 .8870 30 40 .4643 .5243 1.9074 .8857 20 50 .4669 .5280 1.8940 .8843 10 28 00 .4695 .5317 1.88676 .8816 50 10 .4720 .5354 1.8676 .8816 50 20 .4746 .5392 1.8546 .8802 40 30 .4772 .5430 1.8418 .8784 30 40 .4777 .5467 1.8291 .8774 20 40 .4874 .5581 1.7917 .8732 50 10 .4874 .5581 1.7917 .8732 50 20 .4895 .56766 1.7556 .8689 20 30 .4924 .3658 1.7675 .8704 30 40 .495	00 63	.8910	1.9626	.5095	.4540	00	27
30 .4617 .5206 1.9210 .8870 30 40 .4643 .5233 1.9074 .8857 20 50 .4669 .5280 1.8940 .8843 10 28 00 .4695 .5317 1.8807 .8829 00 10 .4720 .5354 1.8676 .8816 50 20 .4746 .5392 1.8546 .8802 40 30 .4772 .5430 1.8418 .8788 30 40 .4797 .5467 1.8291 .8774 20 40 .4874 .5551 1.8165 .8760 10 29 0 .4848 .5543 1.8040 .8742 20 30 .4924 .5658 1.7675 .8732 50 40 .4944 .5658 1.7675 .8089 20 50 .4975 .5735 1.7437 .8075 10 30	50	.8897	1.9486	.5132	.4566		
40 .4643 .5243 1.9074 .8843 10 28 00 .4695 .5317 1.8807 .8829 00 10 .4720 .5354 1.8676 .8816 50 20 .4746 .5392 1.8546 .8802 40 30 .4772 .5463 1.8418 .5788 30 40 .4797 .5467 1.8291 8774 20 40 .4874 .5581 1.7917 .8732 50 10 .4874 .5581 1.7917 .8732 50 20 .4889 .5619 1.7716 .8718 40 40 .4950 .5636 1.7556 .8689 20 40 .4950 .5636 1.7556 .8689 20 30 .5075 .5735 1.7437 .8666 50 20 .5050 .5551 1.7090 .8631 40 30 .5075 <td>40</td> <td>.8884</td> <td>1.9347</td> <td>.5169</td> <td>.4592</td> <td>20</td> <td></td>	40	.8884	1.9347	.5169	.4592	20	
40 .4643 .5243 1.9074 .8843 10 28 00 .4695 .5317 1.8807 .8829 00 10 .4726 .5334 1.8676 .8816 50 20 .4746 .5392 1.8546 .8802 40 30 .4772 .5467 1.8291 8774 20 40 .4797 .5467 1.8291 8774 20 40 .4848 .5543 1.8040 .8746 00 29 00 .4848 .5543 1.8040 .8746 00 20 .4899 .5619 1.7716 .8732 50 40 .4950 .5636 1.7556 .8689 20 40 .4950 .5636 1.7556 .8689 20 30 .5075 .5735 1.7437 .8666 50 20 .5050 .5551 1.7000 .8631 40 30	30	.8870	1.9210	.5206	.4617	30	
50 .4669 .5280 1.8940 .8843 10 28 00 .4695 .5317 1.8807 .8829 00 20 .4740 .5354 1.8676 .8802 40 20 .4746 .5392 1.8446 .8802 40 30 .4777 .5467 1.8291 .8774 20 40 .4797 .5467 1.8291 .8774 20 40 .4874 .5551 1.8040 .8746 00 10 .4874 .5551 1.7197 .8732 50 40 .4899 .5619 1.7796 .8718 40 30 .4924 .5658 1.7675 .8089 29 50 .4975 .5735 1.7437 .8675 10 30 .00 .5000 .5774 1.7321 .8600 00 10 .5025 .5812 1.7205 .8646 50 20 <td>20</td> <td></td> <td>1.9074</td> <td></td> <td></td> <td>40</td> <td></td>	20		1.9074			40	
10 .4720 .5354 1.8876 .8816 50 20 .4746 .5392 1.8546 .8802 40 30 .4772 .5467 1.8291 .8774 20 50 .4823 .5505 1.8165 .8760 10 29 00 .4848 .5543 1.8040 .8746 00 10 .4874 .5581 1.7176 .8718 40 20 .4889 .5619 1.7796 .8718 40 30 .4924 .5638 1.7675 .8704 30 40 .4950 .5636 1.7556 .8689 20 50 .4945 .5735 1.7437 .8660 00 10 .5025 .5812 1.7205 .8646 50 20 .5050 .5851 1.7405 .8646 50 20 .5050 .5851 1.7205 .8646 50 30 .5150 </td <td>10</td> <td></td> <td>1.8940</td> <td></td> <td></td> <td>50</td> <td></td>	10		1.8940			50	
20 .4746 .5392 1.8546 .8802 40 30 .4772 .5480 1.8418 .8788 30 40 .4797 .5467 1.8291 .8774 20 50 .4823 .5505 1.8165 .8760 10 29 .00 .4848 .5543 1.8040 .8746 00 10 .4874 .5581 1.7177 .8732 50 20 .4889 .5619 1.7796 .8718 40 40 .4950 .5696 1.7556 .8689 20 50 .4975 .5735 1.7437 .8675 10 30 .00 .5000 .5774 1.7321 .8660 00 10 .5025 .5812 1.7205 .8646 50 20 .5050 .5851 1.7090 .8631 40 30 .5075 .5890 1.6977 .8616 30 40 <td>00 62</td> <td>.8829</td> <td>1.8807</td> <td>.5317</td> <td>.4695</td> <td>00</td> <td>28</td>	00 62	.8829	1.8807	.5317	.4695	00	28
30 .4772 .5430 1.8418 .8788 30 40 .4797 .5467 1.8291 .8774 20 50 .4823 .5505 1.8165 .8760 10 29 .00 .4848 .5543 1.8040 .8746 00 10 .4874 .5581 1.7917 .8732 50 20 .4899 .5619 1.7796 .8718 40 30 .4924 .5638 1.7675 .8704 30 40 .4950 .5666 1.7556 .8689 20 50 .4975 .5735 1.7437 .8660 00 10 .5025 .5812 1.7205 .8646 50 20 .5050 .5851 1.7090 .8631 40 30 .5075 .5880 1.6977 .8616 30 30 .5150 .6098 1.6643 .8572 00 31 .00 <td>50</td> <td>.8816</td> <td>1.8676</td> <td>.5354</td> <td>.4720</td> <td>10</td> <td></td>	50	.8816	1.8676	.5354	.4720	10	
30 A772 .5480 1.8418 .8788 30 40 .4797 .5467 1.8291 .8774 20 50 .4823 .5505 1.8165 .8760 10 29 .00 .4848 .5543 1.8040 .8746 00 10 .4874 .5581 1.7917 .8732 50 20 .4889 .5619 1.7796 .8718 40 40 .4950 .5660 1.7556 .8689 20 40 .4955 .5735 1.7437 .8675 10 30 .00 .5000 .5774 1.7321 .8660 00 10 .5025 .5812 1.7205 .8646 50 20 .5050 .5851 1.7090 .8631 40 30 .5075 .5890 1.6977 .8616 30 40 .5100 .5089 1.6753 .8587 10 31 <td>40</td> <td>.8802</td> <td>1.8546</td> <td>.5392</td> <td>.4746</td> <td>20</td> <td></td>	40	.8802	1.8546	.5392	.4746	20	
40 .4797 .5467 1.8291 .8774 20 50 .4823 .5505 1.8165 .8760 10 29 .00 .4848 .5543 1.8040 .8746 00 10 .4879 .5619 1.7716 .8718 40 20 .4899 .5668 1.7675 .8689 20 40 .4950 .5686 1.7556 .8689 20 50 .4975 .5636 1.7556 .8689 20 50 .4975 .5636 1.7556 .8689 20 20 .5050 .5851 1.7205 .8646 50 20 .5050 .5851 1.7095 .8631 40 30 .5025 .5812 1.7205 .8646 50 20 .5050 .5851 1.7090 .8631 40 50 .5125 .5909 1.6633 .8572 00 10 .5175<		.8788	1.8418	.5430		30	
50 .4823 .5505 1.8165 .8760 10 29 00 .4848 .5543 1.8040 .8746 00 10 .4874 .5581 1.7917 .8732 50 20 .4899 .5619 1.7796 .8718 40 30 .4924 .5658 1.7675 .8704 30 40 .4950 .5660 1.7556 .8689 20 50 .4975 .5735 1.7437 .8660 00 10 .5025 .5812 1.7205 .8646 50 20 .5050 .5851 1.7090 .8631 40 30 .5075 .5800 1.6877 .8616 30 40 .5100 .5930 1.6864 .8601 20 31 00 .5150 .6009 1.6643 .8577 50 20 .5200 .6084 1.6534 .8557 50 20			1.8291			40	
10 .4874 .5581 1.7916 .8732 50 20 .4889 .5619 1.7796 .8718 40 30 .4924 .5658 1.7675 .8704 30 40 .4950 .5696 1.7556 .8689 20 50 .4975 .5735 1.7437 .8675 10 30 .00 .5000 .5774 1.7321 .8660 00 10 .5025 .5812 1.7205 .8646 50 20 .5050 .5851 1.7090 .8631 40 30 .5075 .5890 1.6977 .8616 30 40 .5100 .5130 1.6864 .8601 20 50 .5125 .5069 1.6753 .8587 10 31 00 .5150 .6009 1.6643 .8572 00 31 00 .5150 .6008 1.6643 .8572 0			1.8165			50	
20 4899 .5619 1.7796 .8718 40 30 .4924 .5658 1.7675 .8704 30 40 .4955 .5636 1.7556 .8689 20 50 .4975 .5735 1.7437 .8675 10 30 00 .5000 .5774 1.7321 .8660 00 10 .5025 .5812 1.7905 .8646 50 20 .5050 .5851 1.7090 .8631 40 30 .5075 .5880 1.6977 .8016 30 30 .5075 .5880 1.6877 .8016 30 40 .5100 .5930 1.6864 .8601 20 50 .5155 .6909 1.6643 .8572 00 10 .5150 .6088 1.6426 .8542 40 30 .5225 .6088 1.6426 .8542 40 30 .5256 <td>00 61</td> <td>.8746</td> <td>1.8040</td> <td>.5543</td> <td>.4848</td> <td>00</td> <td>29</td>	00 61	.8746	1.8040	.5543	.4848	00	29
20 4899 .5619 1.7796 .8718 40 40 .4950 .5658 1.7675 .8704 30 50 .4975 .5636 1.7556 .8689 20 50 .4975 .5735 1.7437 .8675 10 30 00 .5000 .5774 1.7321 .8660 00 10 .5025 .5812 1.7205 .8646 50 20 .5050 .5851 1.7090 .831 40 30 .5075 .5880 1.6977 .8616 30 40 .5100 .5930 1.6864 .8601 20 50 .5150 .6009 1.6643 .8572 0 10 .5175 .6048 1.6534 .8557 10 20 .5200 .6088 1.6426 .8542 40 30 .5225 .6128 1.6319 .8231 20 40 .5250	50	.8732	1.7917	.5581	.4874		
30 44924 .5638 1.7675 .8704 30 50 .4950 .5696 1.7556 .8689 20 50 .4975 .5735 1.7437 .8675 10 30 .00 .5000 .5774 1.7321 .8060 00 10 .5025 .5812 1.7205 .8646 50 30 .5075 .5890 1.6977 .8616 30 40 .5100 .5930 1.6864 .8601 20 50 .5125 .5069 1.6753 .8587 10 31 00 .5150 .6009 1.6643 .8572 00 10 .5175 .6048 1.6426 .8542 40 30 .5225 .6128 1.6319 .8526 30 40 .5250 .6168 1.6212 .8511 20 5342 .6289 1.5900 .8465 50 20 .5348 </td <td>40</td> <td>.8718</td> <td>1.7796</td> <td>.5619</td> <td>.4899</td> <td>20</td> <td></td>	40	.8718	1.7796	.5619	.4899	20	
50 .4975 .5735 1.7437 .8675 10 30 00 .5000 .5774 1.7321 .8660 00 10 .5025 .5812 1.7205 .8646 50 20 .5050 .5851 1.7090 .8631 40 30 .5075 .5880 1.6977 .8616 30 40 .5100 .5930 1.6864 .8601 20 50 .5125 .5969 1.6753 .8587 10 31 00 .5150 .6008 1.6634 .8572 00 10 .5175 .6048 1.6426 .8542 40 30 .5225 .6128 1.6319 .8526 30 40 .5255 .6128 1.6319 .8526 30 30 .5225 .6128 1.6017 .8496 10 32 .00 .5299 .6249 1.6003 .8480 00 <tr< td=""><td>30</td><td></td><td>1.7675</td><td>.5658</td><td>.4924</td><td>30</td><td></td></tr<>	30		1.7675	.5658	.4924	30	
50 .4975 .5735 1.7437 .8675 10 30 00 .5000 .5774 1.7321 .8660 00 10 .5925 .5812 1.7205 .846 50 20 .5050 .5851 1.7090 .8631 40 30 .5075 .5800 1.6877 .8016 30 40 .5100 .5930 1.6864 .8601 20 50 .5125 .5969 1.6753 .8587 10 31 00 .5150 .6009 1.6643 .8572 00 10 .5175 .6048 1.6344 .8557 50 20 .5200 .6088 1.6426 .8742 40 30 .5225 .6128 1.6319 .8326 30 30 .5250 .6168 1.6212 .8511 20 50 .5245 .6289 1.5900 .8465 50 32	20	.8689	1.7556	,5696	.4950	40	
10 .5025 .5812 1.7205 .8646 50 20 .5050 .5851 1.7050 .8631 40 30 .5075 .5890 1.6864 .8601 20 40 .5100 .5930 1.6864 .8601 20 50 .5125 .5969 1.6733 .8587 10 31 00 .5175 .6048 1.6343 .8557 50 20 .5200 .6088 1.6426 .8542 40 30 .5225 .6128 1.6319 .8526 30 40 .5250 .6168 1.6212 .8511 20 50 .5275 .6298 1.6107 .8496 10 32 00 .5299 .6249 1.6003 .8480 00 10 .5348 .6330 1.5798 .8450 40 20 .5348 .6330 1.5497 .8443 30 30	10					50	
20 .5050 .5851 1.7090 .8631 40 30 .5075 .5890 1.6977 .8616 30 40 .5100 .5930 1.6864 .8601 20 50 .5125 .5969 1.6753 .8587 10 31 00 .5150 .6009 1.6343 .8572 00 10 .5175 .6048 1.6534 .8557 50 20 .5200 .6088 1.6319 .8526 30 40 .5250 .6168 1.6319 .8526 30 40 .5250 .6168 1.6212 .8511 20 50 .5299 .6249 1.5000 .8465 10 30 .5348 .6330 1.5798 .8450 40 30 .5343 .6371 1.5697 .8418 20 40 .5388 .6442 1.5397 .8418 20 50 .5422 </td <td>00 60</td> <td>.8660</td> <td>1.7321</td> <td>.5774</td> <td>.5000</td> <td>00</td> <td>30</td>	00 60	.8660	1.7321	.5774	.5000	00	30
30 .5075 .5890 1.6977 .8616 30 40 .5100 .5330 1.6864 .8601 20 50 .5125 .5969 1.6753 .8587 10 31 00 .5150 .6009 1.6643 8572 00 10 .5175 .6048 1.6534 .8557 50 20 .5200 .6088 1.6426 .8742 40 30 .5225 .6128 1.6319 .8526 30 40 .5250 .6168 1.6212 .8511 20 50 .5275 .6208 1.6107 .8496 10 32 00 .5299 .6249 1.6003 .8480 00 10 .5324 .6289 1.5900 .8465 50 20 .5348 .6330 1.5798 .8450 40 30 .5373 .6371 1.5697 .8418 20 30	50	.8646	1.7205	.5812	.5025	10	
40 .5100 .5930 1.6864 .8601 20 50 .5125 .5969 1.6753 .8587 10 31 00 .5150 .6009 1.6643 8572 00 10 .5175 .6048 1.6534 .8557 50 20 .5290 .6088 1.6426 .8542 40 30 .5225 .6128 1.6319 .8526 30 40 .5250 .6168 1.6212 .8511 20 50 .5275 .6208 1.6107 .8496 10 32 00 .5299 .6249 1.6003 .8480 00 10 .5344 .6289 1.5900 .8465 50 20 .5348 .6330 1.5798 .8450 40 30 .5373 .6412 1.5397 .8418 20 40 .5388 .6412 1.5397 .8418 20 50	40	.8631		.5851	.5050	20	
50 .5125 .5969 1.6753 .8587 10 31 00 .5150 .6009 1.6643 .8572 00 10 .5175 .6048 1.6534 .8557 50 20 .5200 .6088 1.6426 .8542 40 30 .5255 .6128 1.6319 .8526 30 40 .5250 .6168 1.6212 .8511 20 50 .5275 .6208 1.6107 .8496 10 32 00 .5299 .6249 1.6003 .8480 00 10 .5324 .6289 1.5900 .8465 50 20 .5348 .6330 1.5798 .8450 40 30 .5373 .6371 1.5697 .8434 30 40 .5388 .6412 1.5597 .8418 20 50 .5446 .6494 1.5389 .8387 00 10	30	.8616	1.6977	.5890	.5075	30	
31 00 .5150 .6009 1.6643 8572 00 10 .5175 .6048 1.6534 .8557 50 20 .5200 .6088 1.6426 .8542 40 30 .5225 .6128 1.6319 .8526 30 40 .5250 .6168 1.6212 .8511 20 50 .5275 .6208 1.6107 .8496 10 32 00 .5299 .6249 1.6003 .8480 00 10 .5324 .6289 1.5900 .8465 50 20 .5348 .6330 1.5798 .8450 40 20 .5348 .6330 1.5798 .8434 30 30 .5373 .6371 1.5697 .8418 20 50 .5422 .6453 1.5497 .8403 10 33 .00 .5446 .6494 1.5399 .8387 00 10 </td <td>20</td> <td>.8601</td> <td>1.6864</td> <td>.5930</td> <td>.5100</td> <td>40</td> <td></td>	20	.8601	1.6864	.5930	.5100	40	
10 .5175 .6048 1.6534 .8557 50 20 .5200 .6088 1.6426 .8742 40 30 .5225 .6128 1.6319 .8526 30 40 .5250 .6168 1.6212 .8511 20 50 .5275 .6208 1.6107 .8496 10 32 00 .5299 .6249 1.6003 .8480 00 10 .5324 .6289 1.5000 .8465 50 20 .5348 .6330 1.5798 .8450 40 30 .5373 .6371 1.5697 .8434 30 40 .5388 .6412 1.5397 .8403 10 50 .5422 .6453 1.5497 .8403 10 20 .5446 .6494 1.5390 .8387 0 30 .5519 .6619 1.5108 .8339 30 30 .5519 <td>10 .</td> <td>.8587</td> <td>1.6753</td> <td>.5969</td> <td>.5125</td> <td>50</td> <td></td>	10 .	.8587	1.6753	.5969	.5125	50	
20 .5200 .6088 1.6426 .8542 40 30 .5225 .6128 1.6319 .8526 30 40 .5250 .6168 1.6212 .8511 20 50 .5275 .6208 1.6107 .8496 10 32 .00 .5299 .6249 1.5000 .8465 50 20 .5348 .6330 1.5798 .8450 40 30 .5373 .6371 1.5697 .8418 20 40 .5388 .6412 1.5597 .8418 20 50 .5422 .6453 1.5497 .8403 10 30 .5471 .6536 1.5301 .8371 50 30 .5519 .6619 1.5108 .8339 30 40 .5544 .6661 1.5013 .8323 20 34 .00 .5568 .6763 1.4319 .8367 10 34 <td>00 59</td> <td>8572</td> <td>1.6643</td> <td>.6009</td> <td></td> <td>00</td> <td>31</td>	00 59	8572	1.6643	.6009		00	31
30 .5225 .6128 1.6319 .8526 30 40 .5250 .6168 1.6212 .8511 20 50 .5275 .6208 1.6107 .8496 10 32 00 .5299 .6249 1.6003 .8480 00 10 .5324 .6289 1.5900 .8465 50 20 .5348 .6330 1.5798 .8450 40 30 .5373 .6371 1.5697 .8434 30 40 .5398 .6412 1.5597 .8418 20 50 .5422 .6453 1.5497 .8403 10 33 00 .5446 .6494 1.5399 .8387 00 10 .5471 .6536 .15301 .8371 50 20 .5495 .6577 1.5264 .8355 40 30 .5519 .6619 1.5108 .8339 30 40	50	.8557	1.6534	.6048	.5175		
30 .5225 .6128 1.6319 .8526 30 40 .5250 .6168 1.6212 .8511 20 50 .5275 .6208 1.6107 .8496 10 32 00 .5299 .6249 1.6003 .8480 00 10 .5324 .6289 1.5900 .8465 50 20 .5348 .6330 1.5798 .8450 40 30 .5373 .6371 1.5697 .8418 20 50 .5322 .6453 1.5497 .8403 10 31 .00 .5446 .6494 1.5390 .8387 00 10 .5471 .6536 .15301 .8371 50 20 .5495 .6577 1.5204 .8355 40 30 .5519 .6619 1.5108 .8339 30 40 .5544 .6661 1.5013 .8323 20 50 <td>40</td> <td>.8542</td> <td>1.6426</td> <td>.6088</td> <td>.5200</td> <td>20</td> <td></td>	40	.8542	1.6426	.6088	.5200	20	
50 .5275 .6208 1.6107 .8496 10 32 00 .5299 .6249 1.6003 .8480 00 10 .5324 .6289 1.5900 .8465 50 20 .5348 .6330 1.5798 .8450 40 30 .5373 .6371 1.5697 .8434 30 40 .5388 .6412 1.5597 .8418 20 50 .5422 .6453 1.5497 .8403 10 33 00 .5446 .6494 1.5399 .8387 00 10 .5471 .6536 1.5301 .8371 50 20 .5495 .6577 1.5204 .8355 40 30 .5519 .6619 1.5108 .8330 30 40 .5544 .6661 1.5013 .8323 20 40 .5568 .6703 1.4326 .8290 00 34	30	.8526	1.6319		.5225	30	
32 00 .5299 .6249 1.6003 .8480 00 10 .5324 .6289 1.5900 .8465 50 20 .5348 .6330 1.5798 .8450 40 30 .5373 .6371 1.5697 .8434 30 40 .5398 .6412 1.5597 .8418 20 50 .5422 .6453 1.5497 .8403 10 33 00 .5446 .6494 1.5399 .8387 00 10 .5471 .6536 1.5301 .8371 50 20 .5495 .6577 1.5264 .8355 40 30 .5519 .6619 1.5108 .8339 30 40 .5544 .6661 1.5013 .8323 20 50 .5568 .6703 1.4919 .8307 10 34 00 .5592 .6745 1.4826 .8290 00	20		1.6212	.6168		40	
10 .5324 .6289 1.5900 .8465 50 20 .5348 .6330 1.5798 .8450 40 30 .5373 .6371 1.5697 .8434 30 40 .5398 .6412 1.5597 .8418 20 50 .5422 .6453 1.5497 .8403 10 33 00 .5446 .6494 1.5399 .8387 00 10 .5471 .6536 1.5301 .8371 50 20 .5495 .6577 1.5204 .8355 40 30 .5519 .6619 1.5108 .8339 30 40 .5544 .6661 1.5013 .8323 20 40 .5544 .6661 1.5013 .8323 20 10 .5606 .6763 1.4826 .8290 00 34 00 .5502 .6745 1.4826 .8290 00 10	10	.8496	1.6107	.6208	.5275	50	
20 .5348 .6330 1.5798 .8450 40 30 .5373 .6371 1.5697 .8434 30 40 .5398 .6442 1.5597 .8418 20 50 .5422 .6453 1.5497 .8403 10 33 .00 .5446 .6494 1.5399 .8387 00 10 .5471 .6536 1.5301 .8371 50 20 .5495 .6577 1.5204 .8355 40 30 .5519 .6619 1.5108 .8330 30 40 .5544 .6661 1.5013 .8323 20 50 .5568 .6703 1.4919 .8307 10 34 .00 .5592 .6745 1.4826 .8290 00 10 .5640 .6830 1.4461 .8258 40 30 .5644 .6873 1.4550 .8241 30 40 <td></td> <td>.8480</td> <td>1.6003</td> <td>.6249</td> <td>.5299</td> <td></td> <td>32</td>		.8480	1.6003	.6249	.5299		32
30 .5373 .6371 1.5697 .8434 30 40 .5398 .6412 1.5597 .8418 20 50 .5422 .6453 1.5497 .8403 10 33 00 .5446 .6494 1.5399 .8387 00 10 .5471 .6536 1.5301 .8371 50 20 .5495 .6577 1.5204 .8355 40 30 .5519 .6619 1.5108 .8339 30 40 .5544 .6661 1.5013 .8323 20 50 .5568 .6703 1.4919 .8307 10 34 00 .5592 .6745 1.4826 .8290 00 10 .5616 .6787 1.4733 .8274 50 20 .5640 .6830 1.4641 .8258 40 30 .5664 .6873 1.4550 .8241 30 40							
40 .5398 .6412 1.5597 .8418 20 50 .5422 .6453 1.5497 .8403 10 33 00 .5446 .6494 1.5391 .8387 00 10 .5471 .6556 .6577 1.5204 .8355 40 20 .5495 .6577 1.5204 .8355 40 30 .5519 .6619 1.5108 .8339 30 40 .5544 .6661 1.5013 .8323 20 50 .5562 .6745 1.4826 .8290 00 10 .5616 .6787 1.4733 .8274 50 20 .5640 .6830 1.4641 .8258 40 30 .5664 .6873 1.4550 .8241 30 40 .5688 .6916 1.4460 .8225 20 50 .5712 .6959 1.4370 .8208 10 35 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
50 .5422 .6453 1.5497 .8403 10 33 00 .5446 .6494 1.5390 .8387 00 10 .5471 .6536 1.5301 .8371 50 20 .5495 .6577 1.5204 .8355 40 30 .5519 .6619 1.5108 .8339 30 40 .5544 .6661 1.5013 .8323 20 50 .5568 .6703 1.4919 .8307 10 34 00 .5592 .6745 1.4826 .8290 00 10 .5616 .6787 1.4733 .8274 50 20 .5640 .6830 1.4641 .8258 40 30 .5964 .6873 1.4550 .8241 30 40 .5688 .6916 1.4460 .8225 20 50 .5712 .6959 1.4370 .8208 10 35					.5373		
33 00 .5446 .6494 1.5399 .8387 00 10 .5471 .6536 1.5301 .8371 50 20 .5495 .6577 1.5204 .8355 40 30 .5519 .6619 1.5108 .8339 30 40 .5544 .6661 1.5103 .8323 20 50 .5568 .6703 1.4919 .8307 10 34 00 .5572 .6745 1.4826 .8290 00 10 .5616 .6787 1.4733 .8274 50 20 .5640 .6830 1.4641 .8258 40 30 .5688 .6916 1.4460 .8225 20 50 .5712 .6959 1.4370 .8208 10 35 .00 .5736 .7002 1.4281 .8192 00 .5760 .7045 1.4106 .8158 40 .90 .5831	20	.8418			.5398	40	
10 .5471 .6536 1.5301 .8371 50 20 .5495 .6577 1.5204 .8355 40 30 .5519 .6619 1.5108 .8339 30 40 .5544 .6661 1.5013 .8323 20 50 .5568 .6703 1.4919 .8307 10 34 00 .5592 .6745 1.4826 .8290 00 10 .5616 .6873 1.4733 .8274 50 20 .5640 .6830 1.4645 .8258 40 30 .5688 .6916 1.4460 .8225 20 50 .5712 .6659 1.4370 .8208 10 35 .00 .5736 .7002 1.4281 .8192 00 10 .5760 .7046 1.4193 .8175 50 20 .5831 .7173 1.4019 .8141 30 30 <td>10</td> <td>.8403</td> <td>1.5497</td> <td>.6453</td> <td>.5422</td> <td>50</td> <td></td>	10	.8403	1.5497	.6453	.5422	50	
20 .5495 .6577 1.5204 .8355 40 30 .5519 .6619 1.5108 .8339 30 40 .5544 .6661 1.5013 .8323 20 50 .5568 .6703 1.4919 .8307 10 34 00 .5562 .6745 1.4826 .8290 00 10 .5616 .6787 1.4733 .8274 50 20 .5640 .6839 1.4641 .8258 40 30 .5638 .6916 1.4460 .8225 20 50 .5712 .6959 1.4370 .8208 10 35 00 .5736 .7002 1.4281 .8192 00 10 .5760 .7045 1.4193 .8175 50 20 .5837 .7133 1.4019 .8141 30 30 .5807 .7333 1.4019 .8141 30 30							33
30 .5519 .6619 1.5108 .8339 30 40 .5544 .6661 1.5013 .8323 20 50 .5568 .6703 1.4919 .8307 10 34 00 .5592 .6745 1.4826 .8290 00 10 .5616 .6787 1.4733 .8274 50 20 .5640 .6830 1.4641 .8258 40 30 .5664 .6873 1.4550 .8241 30 40 .5688 .6916 1.4460 .8225 20 50 .5712 .6959 1.4370 .8208 10 35 00 .5736 .7002 1.4281 .8192 00 10 .5760 .7046 1.4193 .8175 50 20 .5783 .7089 1.4106 .8158 40 30 .5807 .7133 1.4019 .8141 30 30				.6536	.5471		
40 .5544 .6061 1.5013 .8323 20 50 .5568 .6703 1.4919 .8307 10 34 00 .5592 .6745 1.4826 .8290 00 10 .5616 .6787 1.4733 .8274 50 20 .5640 .6833 1.4550 .8241 30 30 .5664 .6873 1.4550 .8241 30 40 .5688 .6916 1.4460 .8225 20 50 .5712 .6959 1.4370 .8208 10 35 00 .5736 .7002 1.4281 .8192 00 10 .5760 .7045 1.4193 .8175 50 20 .5783 .7089 1.4106 .8158 40 30 .5807 .7133 1.4019 .8141 30 40 .5831 .7177 1.3934 .8124 20 .5854 </td <td></td> <td></td> <td></td> <td>.6577</td> <td></td> <td></td> <td></td>				.6577			
50 .5568 .6703 1.4919 .8307 10 34 00 .5592 .6745 1.4826 .8290 00 10 .5616 .6787 1.4733 .8274 50 20 .5640 .6830 1.4641 .8258 40 30 .5664 .6873 1.4550 .8241 30 40 .5688 .6916 1.4460 .8225 20 50 .5712 .6859 1.4370 .8208 10 35 00 .5736 .7002 1.4281 .8192 00 10 .5760 .7046 1.4193 .8175 50 20 .5783 .7089 1.4106 .8158 40 30 .5807 .7133 1.4019 .8141 30 40 .5831 .7177 1.3334 .8124 20 50 .5854 .7221 1.3848 *8107 10							
34 00 .5592 .6745 1.4826 .8290 00 10 .5616 .6787 1.4733 .8274 50 20 .5640 .6830 1.4641 .8258 40 30 .5664 .6873 1.4550 .8241 30 40 .5688 .6916 1.4460 .8225 20 50 .5712 .6959 1.4370 .8208 10 35 00 .5736 .7002 1.4281 .8192 00 10 .5760 .7046 1.4193 .8175 50 20 .5783 .7089 1.4106 .8158 40 30 .5807 .7133 1.4019 .8141 30 40 .5831 .7177 1.3834 .8124 20 50 .5854 .7221 1.3848 -8107 10							
10 .5616 .6787 1.4733 .8274 50 20 .5640 .6830 1.4641 .8258 40 30 .5664 .6873 1.4550 .8241 30 40 .5688 .6916 1.4460 .8225 20 50 .5712 .6959 1.4370 .8208 10 35 00 .5736 .7002 1.4281 .8192 00 10 .5760 .7045 1.4193 .8175 50 20 .5783 .7089 1.4106 .8158 40 30 .5807 .7133 1.4019 .8141 30 40 .5831 .7177 1.3934 .8124 20 50 .5854 .7221 1.3848 -8107 10	10	.8307	1.4919	.6703	.5568	50	
20 .5640 .6830 1.4641 .8258 40 30 .5664 .6873 1.4550 .8241 30 40 .5688 .6916 1.4460 .8225 20 50 .5712 .6959 1.4370 .8208 10 35 00 .5736 .7002 1.4281 .8192 00 10 .5760 .7046 1.4193 .8175 50 20 .5783 .7089 1.4106 .8158 40 30 .5807 .7133 1.4019 .8141 30 40 .5831 .7177 1.3934 .8124 20 50 .5854 .7221 1.3848 -8107 10							34
30 .5664 .6873 1.4550 .8241 30 40 .5688 .6916 1.4460 .8225 20 50 .5712 .6959 1.4370 .8298 10 35 00 .5736 .7002 1.4281 .8192 00 10 .5760 .7046 1.4193 .8175 50 20 .5783 .7089 1.4106 .8158 40 30 .5807 .7133 1.4019 .8141 30 40 .5831 .7177 1.3834 .8124 20 50 .5854 .7221 1.3848 .8107 10							
40 .5688 .6916 1.4460 .8225 20 50 .5712 .6959 1.4370 .8208 10 35 00 .5736 .7002 1.4281 .8192 00 10 .5760 .7046 1.4193 .8175 50 20 .5783 .7089 1.4106 .8158 40 30 .5807 .7133 1.4019 .8141 30 40 .5831 .7177 1.3934 .8124 20 50 .5854 .7221 1.3848 -8107 10							
50 .5712 .6959 1.4370 .8208 10 35 00 .5736 .7002 1.4281 .8192 00 10 .5769 .7046 1.4193 .8175 50 20 .5783 .7089 1.4106 .8158 40 30 .5807 .7133 1.4019 .8141 30 40 .5831 .7177 1.3934 .8124 20 50 .5854 .7221 1.3848 -8107 10							
35 00 .5736 .7002 1.4281 .8192 00 10 .5760 .7046 1.4193 .8175 50 20 .5783 .7089 1.4106 .8158 40 30 .5807 .7133 1.4019 .8141 30 40 .5831 .7177 1.3934 .8124 20 50 .5854 .7221 1.3848 *8107 10							
10 .5760 .7046 1.4193 .8175 50 20 .5783 .7089 1.4106 .8158 40 30 .5807 .7133 1.4019 .8141 30 40 .5831 .7177 1.3934 .8124 20 50 .5854 .7221 1.3848 *8107 10	10	.8208	1.4370	.6959	.5712	50	
20 .5783 .7089 1.4106 .8158 40 30 .5807 .7133 1.4019 .8141 30 40 .5831 .7177 1.3934 .8124 20 50 .5854 .7221 1.3848 .8107 10				.7002			35
30 .5807 .7133 1.4019 .8141 30 40 .5831 .7177 1.3934 .8124 20 50 .5854 .7221 1.3848 .8107 10				.7046			
40 .5831 .7177 1.3934 .8124 20 50 .5854 .7221 1.3848 8107 10							
50 .5854 .7221 1.3848 8107 10							
							36
N. Cos. N. Cot. N. Tan. N. Sin.	-					.,,	

0	,	N. Sin.	N. Tan.	N. Cot.	N. Cos.		
36	00	.5878	.7265	. 1.3764	.8090	00	54
	10	.5901	.7310	1.3680	.8073	50	
	20	.5925	.7355	1.3597	.8056	40	
•	30	.5948	.7400	1.3514	.8039	30	
l	40	.5972	.7445	1.3432	.8021	20	
l	50	.5995	.7490	1.3351	.8004	10	
37	00	.6018	.7536	1.3270	.7986	00	53
t	10	.6041	.7581	1.3190	.7969	50	i
ŀ	$\frac{20}{30}$.6065	.7627	1.3111	.7951	40 30	
i	40	.6088 .6111	.7673 .7720	1.3032 1.2954	.7934 .7916	20	
	50	.6134	.7766	1.2876	.7898	10	
38	00	.6157	.7813	1.2799	.7880	00	52
١ "	10	.6180	.7860	1.2723	.7862	50	~
l	20	.6202	.7907	1.2647	.7811	40	
	30	.6225	.7954	1.2572	.7826	30	
ı	40	.6248	.8002	1.2497	.7808	20	
	50	.6271	.8050	1.2423	.7790	10	
39	00	.6293	.8098	1.2349	.7771	00	51
	10	.6316	.8146	1.2276	.7753	50	
	20	.6338	.8195	1.2203	.7735	40	
1	30	.6361	.8243	1.2131	.7716	30	
1	40 50	.6383 .6406	.8292 .8342	1.2059 1.1988	.7698 .7679	20 10	
40	00	.6428	.8391	1.1918	.7660	00	50
	10	.6450	.8441	1.1847	.7642	50	
1	20	.6472	.8491	1.1778	.7623	40	
	30	.6494	.8541	1.1708	.7604	$\frac{30}{20}$	
l	40 50	.6517 .6539	.8591 .8642	$1.1640 \\ 1.1571$.7585 .7566	10	
41	00	.6561	.8693	1.1504	.7547	00	49
	10	.6583	.8744	1.1436	.7528	50	
l l	20	.6604	.8796	1.1369	.7509	40	
	30	.6626	.8847	1.1303	.7490	30	
1	40	.6648	.8899	1.1237	.7470	20	
L	50	.6670	.8952	1.1171	.7451	10	
42	00	.6691	.9004	1.1106	.7431	00	48
1	10	.6713	.9057	1.1041	.7412	50	
	20 30	.6734 6756	.9110	1.0977	.7392	40 30	
1	40	.6756 .6777	.9163 .9217	1.0913 1.0850	.7373 .7353	20	
	50	.6799	.9271	1.0786	.7333	10	
43	00	.6820	.9325	1.0724	.7314	00	47
	10	.6841	.9380	1.0661	.7294	50	
	20	.6862	.9435	1.0599	.7274	40	
	30	.6884	.9490	1.0538	.7254	30	
	40	.6905	.9545	1.0477	.7234	20	
	50	.6926	.9601	1.0416	.7214	10	
44	00	.6947	.9657	1.0355	.7193	00	46
	10	6967	.9713	1.0295	.7173	50	
	20	.6988	.9770	1.0235	.7153	40	
1	30	.7009	.9827	1.0176	.7133	30	
	40 50	.7030 .7050	.9884 .9942	1.0117 1.0058	$.7112 \\ .7092$	20 10	
45	00	.7071	1.0000	1.0000	.7071	00	45
_		N. Cos.	N. Cot.	N. Tan.	N. Sin.	,	0





FOR REFERENCE

HOF CA SS

NOT TO BE TAKEN FROM THE ROOM

AA 000 122 887 3

